

# **NATIONAL INSTITUTE OF SIDDHA**

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**CHENNAI - 600 032**

**A STUDY ON**

**(DISSERTATION SUBJECT)**

## **VATHA KARAPPAN**



*For the partial fulfillment of the  
requirements to the Degree of*

**DOCTOR OF MEDICINE (SIDDHA)**

**BRANCH III – SIRAPPU MARUTHUVAM**

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## **CERTIFICATE**

Certified that I have gone through the dissertation submitted by **Dr.C.THILAGAVATHI ARIYANATCHI** a student of final M.D(Siddha) Branch-III **Sirappu Maruthuvam**, National Institute of Siddha, Tambaram sanatorium, Chennai-47, and the dissertation work has been carried out by individual only. This dissertation does not represent or reproduce the dissertation submitted and approved earlier.

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## INTRODUCTION

" , í , ° ¼ ì , É ¢ ó ¾ Ä Ã É £ ý È ¾ ó ¾ ¢ ì  
 , ½ Ä ¾ ¢ Ä ¢ ý È ; û Å ½ í , ¢ ì , Õ ò Ð û ¨ Å ò Ð § ¾  
 / Ä í , û Ä ¢ Ä ; ý § Å ¢ Ó Õ , ý À ; ¾ ò § Ä ; ü È ¢  
 / Ä ¨ É Ä ; Û ò Ä Ä ; ° ¾ ¢ Ä ¢ Õ ¾ ; û § Ä ; ü È ¢  
 Ä í , Ç Ä ; ó ¾ ò Ð Ä á Ä ; Ô û § Å ¾  
 Ä ; ã Ä ¢ Ä ; , ¼ í , Ç ; ö ó Ð § í ; ì , ¢  
 Ä í , Ó Ú Ä ¢ ó á ¨ Ä Å ° É Ä ;  
 Å ¨ É Ä ÷ , Û Ä É Ä , ¢ Æ Å ¨ Ä ì § Å § É ”  
 - ¨ Ä ¢ ÷ , ; ì ò ° ¢ ò ¾ Ä Õ ò Ð Ä ò

### **Nature cures everything**

- **Hippocrates**

Siddha system of medicine, well known for its simplicity and credibility has been evolved by spiritual scientists called siddhars.

### **“Health is Wealth”**

**Of all the wealth Man can gain, the most precious is being free from disease.**

Health is defined by the World Health Organization as the “State of complete physical, mental and social well being and not merely the absence of disease and infirmity”.

The siddha system has been serving the mankind from time immemorial by providing remedy to diseases of all system of the human body.

The advantage and unique feature is the removal of the root causes of the disease and perfect remedy for body & mind.

"¡°¡øÄç¼§Å §¾Åçìî º¾¡°çÁýÈ¡ý  
 ¡°¡øÄ§Å §¾ÅçÔõ ¿ó¾çìî ¡°¡øÄ  
 ¿øÄç¼§Å ¿ó¾ç¾ý Åó¾çÃçìî ¡°¡øÄ  
 ¿ÂÓ¼ý ¾ýÅó¾çÃç ÂÍÁÉçìî ¡°¡øÄ  
 «øÄç¼§Å ÂÍÁ¾çÂ¡ó §¾Å÷ ¾¡Óõ  
 «¿ó¾çÂ÷ ÌÃð¾ç¼§Å ÂõÓ É£ó¾çÃý  
 ÒøÄç¼§Å ÒÄð¾çÂ÷ ÌÀ§¾ °çì,  
 ÒÄð¾çÂÔõ §¾"ÃÂüÎð Ò,ýÈçð ¼¡§Ã"  
 - ä, ç"Ãð¾çÂ °çó¾çÁ½ç ±ñßÚ

The above verse reveals the history of siddha medicine. Our system of medicine is closely related to religion.

**“Science without religion is blind and  
 Religion without science is lame”**

**- Albert Einstein**

Siddha medicines are very effective in treating chronic diseases and particularly skin diseases. That’s why I have selected one of the skin diseases ‘vatha karappan’ as my dissertation topic.

In Yugi Munivar Vaidhya Chindhamani, Karappan is classified into 7 types. Vatha karappan comes under this classification.

Skin is one of the components of Prithvi (earth) and this is indicated in sathakanadi.

"§°ÃðÀ¡ °¼Á¡îÍ Áñ½çý ÜÜ  
 ¡°ÈçÁÂç÷ §¾¡ø ±ÖðÀç"È°ç ¿Ãð"Àó¾çÌð"  
 - º¾, ¿¡Ê

$\frac{3}{4}¡ø = Áñ + \frac{3}{4}Ô$

So any dearrangement in Theyu and its components may affect the skin by disturbing the functions of saaram, senneer, oon and kozhuppu.

Man highly reflects his surroundings. The components of pancha pootha that constitute the universe are the same components which constitute human body. This is indicated by siddhars as given below;

"«ñ¼ð¾çÖûÇ§¾ Àçñ¼ð  
Àçñ¼ð¾çÖûÇ§¾ «ñ¼ð  
«ñ¼Óð Àçñ¼Óð ´ý§È  
«ÈçóÐ¾¼ý À¼÷ìð §À¼§¾"

- °ð¼ÓÉç »¼Éð.

Skin acts as a linking media between our body and the outer world. The skin is the first organ affected by any change in the universe.

Because the skin is closely related to the mind, even the slightest distress (or) strain of the mind will be reflected by skin, in the form of itching and so on.

"§Å÷ À¼Ö¾·ÆÀ¼Ö Áçï°çÉì¼ø !ÁøÄ !ÁøÄ  
ÀüÀ !°óàÄð À¼§Ä"

Herbs are astonishingly accurate and safe. They also reduce the recurrence of attacks. So the author has selected a herbal drug for vatha karappan.

The author hopes that this work on “**Vatha Karappan**” would provide better information by the clinical trial with selected drugs.

This is only a preliminary study.

### **Drugs of choice:**

#### **1. Internal Use :**

**Vatha Karappan Chooranam** 1-2 gm (Twice a day Morning & Evening with palm jaggary).

#### **2. External use :**

**Aamanakku Ennai** (அமணக்கு ±ñ¼/2ð).

## **AIM AND OBJECTIVES**

The aim of this dissertation is to study the effect of the drugs, ie, vatha karappan chooranam (Internal) amanakku ennai (External) on the course of the disease **“Vatha Karappan”**.

- ❖ To know about the incidence of disease in people of different age, life style, occupation, socio-economical status, family history and also the impact of seasonal variations.
- ❖ To know how the disease alters the normal conditions with reference to Mukkutram, Poripulangal, Envagai thervugal, Ezhu udar kattugal, Neerkuri and Neikuri.

***“Several tons of theory can not equal an ounce of practice”***

– **Swami Sivanandha.**

- ❖ To do the bio-chemical analysis, pharmacological and micro biological studies of the trial drugs.
- ❖ To use the modern parameters to confirm the diagnosis and follow the prognosis of the disease.
- ❖ To produce an awareness among the people about the prevention and to avoid further recurrence of disease by personal hygienic measures.



## SIDDHA ASPECTS

### நோய் இயல்: (Definition)

§¾Äçø ¾Äç÷ ÌÖ, Òñ, ¾ÊòÒ ¬,çÂ ÌÈçÌ½í,“Ç ¬¼Ä À¼,“Ç ¬ñ¼ì,ç, «ùÄç¼í,Ççø Åñ,õ, Ì,ìòÒÇí,ù ñÎ «øÄÐ Ì¾çø §ÀíýÚ §¾ìø ÍÁÍÃòÀì,ç, §¾ìÄçý þÂü, çÈò¾ §ÅÚÀìò¾ç °çÄ\$Å“Ç ÌÊòÒñ¼ì,ç ç£÷ ,°ç¾ø ¬,çÂ ÌÈçÌ½í,“Ç ,ìÍò §¾ìüÀç½ç“Â ,ÃòÀíý «øÄÐ ,ÃòÀý ±ýÚ ÜÚÅ÷.

### நோய் வரும் வழி: (Aetiology)

“ஏழாந் கரப்பானின் உற்பத்திக் கேளாய்  
ஏற்றமாய் மாமிசங்கள் புசிக்கையாலும்,  
கூழாந் கம்புதினை வரகு சாமை  
பொடிதான கிழங்குவகை யருந்தலாலும்,  
பாழாந் பெண் மாயை தன்னிற் சிக்கும்  
பாங்காந் விரகத்தால் முயற்சியாலும்  
தாழாந் பண்டங்கள் சமைத்துத் தின்னல்  
தாக்குமே கரப்பான் தன் சாயல் தானே  
சாயலாய்த் தனக்குத் தான் மூத்த பெண்ணைத்  
தாவினோர் தாழ்ச்சியாஞ்சாதி தன்னில்  
காயலாய்க் கலந்துண்டோர் கலகம் செய்தோர்  
கற்புடைய மங்கையரைக் கருதினோர்கள்  
வாயலாய் வாழ் மரத்தை வெட்டினோர்கள்  
மருத்துவர்கள் வண்ணார் நாவிதர்கள் கூலிக்  
கூயலாய்க் கொடா தோர்கள் குருநிந்தித்த  
கொடும்பாவி கரப்பானிற் குறிக் கொள்வாரே”

- யுகி வைத்திய சிந்தாமணி  
(கரப்பான் ரோக நிதானம்)

- ❖ Excessive intake of fish, meat, cereals like ragi, maize, rhizomes.
- ❖ Excessive sexual indulgence.
- ❖ Anti social activities which ultimately end in psychic disturbances leading to Karappan.

“பெருகுஞ் சோள மிறுங்கும் பெருங்கம்பு

வரகு காருடன் வாழையின் காயோடு  
உரைகொள் பாகல் கெளிற்று மீன் உண்டிடில்  
விரிவ தாய்க்கரப் பானுமி குந்ததே”

- சித்த மருத்துவம் சிறப்பு

- ❖ This verse given above specifies the food items consumption of which can produce or aggravate karappan that is, bitter gourd, ragi, maize, unripened banana, fish items.

“சங்கையில் விஷ கரப்பான் வருமானேது  
சாரமுடன் கிருமி விழுந்தன்மையேது  
உட்டிணமே அதிகம் வருமிந்திரிய போகத்தா  
லுழறுதுருகி யத்தியிலேவேவு கொண்டு  
நட்டணமாய் வெந்த தொரு மச்சை தன்னில்  
நாட்டமிட்ட கிருமியதுயணுகும் போது  
மட்டுடனே கிருமியெல்லாம் பறந்தங்கேறி  
வகையுடனே மாங்கிஷத்தைத் துளைத்து மேவும்”  
“திட்டமுடன் விட கரப்பான் பறந்து மேலே  
தினவுடனே பரபரத்துச் சொறியுண்டாமே  
பயல்மொழியிர் தேகத்தில் கிருமிதானே  
பரந்துஏவி குட்டம்போல் புள்ளிகாணும்  
மயலதுவுங் கிருமியுந்தான் நடந்து புக்கில்  
மேனியது சரசரென வெடித்துப் புண்ணாற்  
கயல் பெருகும் குழல் மடவீர் சொல்லக் கேளிர்  
கரகரத்துச் சொறி பெருகுங் கரப்பான் தானே”.

- குரு நாடி நூல்

Excessive Sexual indulgence aggravates Azhal thathu which in turn affects the “ Kozhupphu” and “ Thasai” of the seven udal kattugal. The micro-organisms enter through these affected thathus and cause Karappan.

“வாதபித்தங் கபமிவை மூன்றவர்

றேது வால்வெளி வால்மிடி யாவினர்  
 கோதை யாரடிய பார்வையர் வாற்குளிர்  
 பேத நிரிவை யாலுன பேசுகேள்  
 வேகக் காற்றதினர் பனை வெல்லத்தால்  
 பாக மிக்கலான் மேதிப் பாவெய்யலால்  
 தாகமானி வருக்க திசார்தலால்  
 போக வாழை வழுதலை முள்ளிக்காய்  
 காயும் பல்லிடத் தாற்சுரத் தாற்களில்  
 எயும் வண்டெலி யால்வருமே துவெளி  
 குடி நல்லறிவான எருவினார்  
 யன மான கரப்பான் வகைகளே”

- பரராச சேகரம் ..... சிரரோக பகுதி

- ❖ Living in torrid climate and cold weather.
- ❖ Excessive sexual indulgence.
- ❖ Drinking contaminated water.
- ❖ Airborne infection.
- ❖ Excessive intake of palm jaggery and brinjals, plantain etc.,
- ❖ Poisonous bites

are the predisposing factors.

### நோய் எண் (Classification)

“எண்பது கரப்பான் தன்னை யியம்பிடுமாறு கேளீர்  
 நண்பிடும் வாதம் பித்தம் நலம்கெட்டுத்தானம் வீங்கும்  
 புண்படும் கரங்கள் சந்து புலைந்துடல் கடுத்து நோகும்  
 வன்மையுடன் வெடித்து சூலை வருவது ரணமீதென்னே”

- அகத்தியர் ரண நூல்

As mentioned above karappan is classified into 80 types.

“ ஆமென்ற கரப்பான்தான் ஏழுவிதமாகும்

அடங்காத வாதத்தின் கரப்பானோடு  
காமென்ற கண்டமாங் கரப்பானாகும்  
கருகிய தோர் வறட்சியாங் கரப்பானோடு  
தேமென்ற திமிர்வாத கரப்பான் நாலும்  
சிரசினிலே பெருங் கபாலக் கரப்பான்  
கோமென்ற பித்தமாங் கரப்பானோடு  
பெரிய சேட்டுமக் கரப்பான் பெயர்தானே”

- யுகி வைத்திய சிந்தாமணி

As per the verse of yugi given above, karappan is classified in to seven types.

1. வாத கரப்பான் ( vatha karappan)
2. பித்த கரப்பான் (pitha karappan)
3. கப கரப்பான் (kaba karappan)
4. திமிர்வாத கரப்பான் (Thimirvatha karappan)
5. கண்ட கரப்பான் (kanda karappan)
6. கபாலக் கரப்பான் (kabala karappan )
7. வறட்சி கரப்பான்; (Varatchi karappan)

“செப்புவாதக்கரப்பன் சேர்வரட்சிக்கரப்பன்

வெப்பறும்பெருங்கரப்பன் விரற்றிமிர்வாதமென்னும்  
கப்புறுகரப்பனோடு கபாலத்திற்சேர்கரப்பன்  
தப்பறுவிஷபாகத்திற் சார்ந்திடுங்கரப்பனாமே.

கரப்புறுபுடைகரப்பன் கரந்துகெண்டைக்கரப்பன்  
துரப்புறுசொறிகரப்பன் தூங்கிடுகரப்பானோடு  
நிரப்பிவீங்குக்கரப்பன் நீண்டிடுவெடிக்கரப்பன்  
அரிப்புறுகரப்பானோடு அடர்காணாக்கடிக்கரப்பன்

கடித்திடுசெங்கரப்பன் கருதுமூலக்கரப்பன்  
அடுத்தசுருணிகரப்பன் அழற்றுகொள்ளிக்கரப்பன்  
துடித்தகொப்புளக்கரப்பன் தோன்றுகண்டக்கரப்பன்  
நெடுத்தகற்கரப்பனோடு நீள்பொத்திக்கரப்பனாமே

ஆகுங்காதிற்கரப்ப னாமிருபத்து மூன்றில்

வாகுறுகுணங்களோடு மருவிடுமருந்துஞ்சிங்கைச்  
சேகராரியகோனான செகராசசேகரன்றன்  
ஓகைசேர்ந்திடுவதற்கா யுலகினர்க்குரைத்ததாமே.

- செகராசசேகர வைத்தியம்

- |                       |                        |
|-----------------------|------------------------|
| 1. வாத கரப்பான்       | 13. அரி கரப்பான்       |
| 2. வறட்சி கரப்பான்    | 14. காணாக்கடி கரப்பான் |
| 3. பெருங் கரப்பான்    | 15. செங் கரப்பான்      |
| 4. திமிர்வாத கரப்பான் | 16. மூல கரப்பான்       |
| 5. கபாலக் கரப்பான்    | 17. அசுகுணி கரப்பான்   |
| 6. விஷபாக கரப்பான்    | 18. கொள்ளி கரப்பான்    |
| 7. புடை கரப்பான்      | 19. கொப்புள கரப்பான்   |
| 8. கெண்டைக் கரப்பான்  | 20. கண்ட கரப்பான்      |
| 9. சொறி கரப்பான்      | 21. கற் கரப்பான்       |
| 10. தூங்கு கரப்பான்   | 22. பொதி கரப்பான்      |
| 11. வீங்குக் கரப்பான் | 23. காதிற் கரப்பான்    |
| 12. வெடி கரப்பான்     |                        |

கரப்பான் நோயின் பொதுக்குறிகுணங்கள்

(General Signs and Symptoms)

"±ñÀÐ ,ÃðÀ;ý ¾ý" dÂçÂðÀçÎ Á;Ú §,Çç÷  
¿ñÀçÎð Å;¾ð Àçð¾ð ¿,Äð',ðÎð ¾;Éð Å£îð  
ÒñÀÎí ,ÃðÀ;ý °ðÐ Ò"ÄóJ¼ø ,ÎðÐ §¿;Îð  
Åý" ÁÔ¼ý !ÂÊðÐî Ý"Ä ÅÕÅÐ Ã½Á£¼ý§É"  
"-"ÉîÍ\$Á ÅÂçÚ¾ýý °£¾î¿;Îð  
- %ø½Á;ð ãð¾çÃó¾; ÓÕî,ç Å£Øð  
«"ÉîÍ\$Á Âî,!ÁøÄ;ð !°;ÃçÔñ¼;ð  
«ÆÄ; ,!ÂÐðÀÄ;ðî ,î,¿§Ä;Ôð

Ò" ,r°\$ÁÉç Äçí,ð¾çü Òñ\$À;Ö Õî,çð

!À;Êô!À;ÊÂ;ö Íñ½;õÒì ,ü§À;ø Å£Øõ  
 „ÇîÍ§Á ¿£§Ã;Î ÁÄÓQ;°çìõ  
 „°çÔ§Á „ÃôÀ;É;õ"

- « „ò¾⁄çÂ÷ ÅçÃ½áø

- ❖ Swelling all over the body.
- ❖ Pain in the joints of the body.
- ❖ Body temperature rises.
- ❖ Abdominal discomfort with dysentery and burning micturition.
- ❖ Appearances of papules, vesicles which burst leads to ulcer formation.
- ❖ Oozing from the lesion.
- ❖ Itching all over the body.
- ❖ Scanty micturation and Constipation.

## வாத கரப்பான் பொதுக்குறிகுணங்கள்

“உடம்பெலாம் வெதும்பிநொந்து உளைந்துகால்சந்துகைக  
எிடங்களிற்சுரந்துவீங்கி யிருந்துபின்னுவாதியாகி  
முடங்கியேவரண்டுதோன்றி முற்றியேவெடித்துப்புண்ணாம்  
இடங்கொடாக்கரப்பன்வாத குணமிதென்றியம்பலாமே”

“சந்துதாள்மொழிபொருத்துத் தானங்களுளைந்துவீங்கி  
வந்துதான்புண்போற்காயம் வருந்ததியேயிருந்துவாடி  
நொந்துதான்கனத்துவற்றி நோவுடன்சொறியுண்டாகும்  
இந்தநோய்தானும்வாத கரப்பனென்றியம்பலாமே.”

“இருந்தெழுந்திருக்கும்போது மியற்றுங்கால்கரங்கள்சந்து  
வருந்திடத்திமிர்த்துவீங்கி வரண்டிடில்வெடித்துப்புண்ணாம்  
திருந்தியவங்கந்தானும் செயமறப்பொருமுமாகில்  
வருந்துமிக்குணங்கள்கண்டால் வாதமாங்கரப்பனாமே.”

“நொந்துகன்றியதலத்தில் நோவுடைபுண்கள்தன்னில்  
வந்துவல்லாயுதங்கள் வலுவுறத்தைத்தடத்தில்  
சந்துதாள்மொழிபொருத்துத் தானங்களதிலேயாகில்  
வந்துதாள்தொடுக்குமெய்யில் வாதமாங்கரப்பனாமே.”

“கண்ணுந்தாங்கிநடுவுந்தி கனத்துச்சுரந்துவெதும்புமுடல்  
நண்ணுந்துடையுங்கனதிமிராய் நைந்தேதலையுங் கிறுகிறுக்கும்  
மண்ணிற்பிறந்தோர் தங்களிடம் வந்தேவருந்தமயக்கிடுகில்  
எண்ணிவாதகரப்பனென இதுவும் பேசலாமென்றார்”

“வீங்குங்குத்தும்மிகவுளையும் விடாமற்றிமிர்த்துவீங்கிநிற்கும்  
ஏங்கப்புண்ணிற்சலம் விழுத லிதுவந்தினவு சொறிவுசெய்யும்  
நீங்கிச் செவ்வேதீராது நெடுநாட்பட்டே மசகிநிற்கும்  
தேங்கச்சுட்டுப்புகைத்துவிடத் தீரும்வாதகரப்பனிதே.

- செகராசசேகர வைத்தியம்

- ❖ The body temperature rises.
- ❖ The lesions start as dry vesicles and later become exudative in nature leading to ulcer formation with secondary infection.
- ❖ The lesions are highly Itchy in nature.
- ❖ Pain and swelling in the affected areas of flexures of upper and lower limbs (like wrist Knee, ankle joints, etc.,).
- ❖ Difficulty in walking due to swelling in the joints.
- ❖ In severe cases extreme drowsiness, oedema of lower abdomen.
- ❖ The lesions show recurrence.

" |,iûÇ§Å ¯¼ð!ÀøÄ;õ !ÅÐðÀ;ö |,iôÐ  
 Î¼¼Ð§Á Áç,î RÃóÐ Å£i,Á;Ìõ  
 ÅçûÇ§Å §¾,|ÁøÄ;õ Òñ§À;ø |,iôÐ  
 !ÅÊðÐ§Á Òñ½;Ìõ ÅçÃø,û °óÐ  
 ÓûÇ§Å Ó¼¡,ç§Â ¸ÃðÒ ,iÏõ  
 !Á;Æç,û Àì,Áçì, þ¼Áç, ¯Ã÷óÐ  
 ÁûÇ§Å NkdpaJ tuz;L fhZk;  
 thjkhq; ,ÃðÀ;ýÈý Åd;“Á¾;§É"  
 - ä,çÓÉç “Ãð¾çÂ °çó¾;Á½ç

That is,

- ❖ Excessive body heat
- ❖ Pain and swelling all over the body
- ❖ Appearances of vesicles, exudates
- ❖ Formation of ulcers
- ❖ Difficulty to use affected limbs due to pain and swelling
- ❖ Dryness of the body



## Prognosis of Karappan (°;ò¾¢Âõ - «°;ò¾¢Âõ)

"ã÷ì,Á;õ °;ò¾¢Âõ¾ ¤;Æ¢Âì §,Ç;ö  
!Á;Æ¢,¢ýÈ Å¾,ÃôÀ;ý Èý§É;Î  
°÷ì,Á;õ À¢ò¾,ÃôÀ;ÛÁ; Ìõ  
- Â÷,¢ýÈ ÅÈð°¢Â;í,À;Äì,ÃôÀ;ý  
¾÷ì,Á; apÐ;Öï °;ò¾¢ÂÁ;õ  
¾Ûì,É ¾¢Á¢÷Å¾,ÃôÀ;ý,ñ¼õ  
¿÷ì,Á;ï §°ðÀ,ÃôÀ;ýÈý §É;Î  
!°À¢Â§¾;÷ þÐ ãýÚõ «°;ò¾¢ÂÁ;§Á"  
- ä,¢ ¤ò¾¢Â °¢ó¾;Á½¢

### °;ò¾¢Âõ(curable)

1. Å¾,ÃôÀ;ý(vatha karappan)
2. À¢ò¾,ÃôÀ;ý(pitha karappan)
3. ÅÈð°¢,ÃôÀ;ý(varatchi karappan)
4. À;Ä,ÃôÀ;ý(kabala karappan)

### «°;ò¾¢Âõ (incurable)

- 1.¾¢Á¢÷Å¾,ÃôÀ;ý(Thimirvatha karappan)
- 2.,ñ¼,ÃôÀ;ý(kanda karappan)
- 3.§°ðÐÁ,ÃôÀ;ý(setthuma karappan)

### பத்தியம் மற்றும் உணவு முறை

“பத்தியத்தை நோயையனு பானத்தை லங்கணத்தைப்  
பத்தியத்தை முன்மருவன் பண்ணலிற்கொள் - பத்தியத்தை  
ஏகமா யார்த்தாலு மேறாச் செவிவழிபோனோய்  
ஏகமா யார்த்தாலு மெய்”

-தேரன் யமக வெண்பா

❖ கரப்பான் நோயினை உண்டாக்கக்கூடிய மற்றும் அதிகப்படுத்தக்கூடிய உணவு  
வகைகளை நீக்க வேண்டும். அவையாவன

### சோளம் - Sorghum Vulgare

“சோளமெனப் போர் படைத்த சோறுகளினாலும் உடலில்  
மீளாச் சொறிசிரங்கு விர்த்தியாகும் நாளுங்  
கரப்பானும் உண்டாம் கனமருந்தும் பாழாம்  
பரப்பனைய கண்மாதே! பார்”

### கொள் - Dolichos Biflours

“குடல்வாதங் குன்மமுண்டாங் கொள்மருந்தோ நாசம்  
அடலேறு பித்தமிக ஆகுங் - கடுகடுத்த  
வாத நீரேற்றமொடு மன்னுகுளிர் காய்ச்சலும்போஞ்  
சாதி நறுங் கொள்ளுக்குத் தான்”

### பாகல் - Memoridica Charantia

“மருந்துகளின் நற்குணத்தை மாற்றும் அ.:தன்றோ  
திருந்தவலி வாதத்தைச் சேர்க்கும் - பொருந்துபித்தங்  
கூட்டுமதி பத்தியத்தைச் கொண்டிருக்கும் வன்கரப்பான்  
காட்டுக் கொம்புப் பாகற் காய்”  
பித்தமொடு வாதப் பெருக்கை மிக உண்டாக்குந்  
தந்து கரப்பானைத் தருவிக்கும் - பற்றி ரத  
தார பாடாணந் தமை முறிக்குந்த தப்பாது  
காரவல்லியாம் பாகற்காய்  
சில மீன் வகைகளையும் நீக்க வேண்டும்.

“மயிறி குறவை வரால் தேளி  
மற்றும் குறவை நாய்க் கெளிறு  
அயிரை சன்னை பத்தியமாம்  
ஆகா மீன்கள் இனிக்கேளும்  
உயரும் வாளை இறால் கூனி  
ஓங்கு கெளிறு விலாங்கு கெண்டை  
கயலோடிவைகள் ஆகாவாங்  
காரார் குழலே கண்டுரையே”

#### **கொய்யா - Psidium Guajava**

திரிதோஷம் சென்னித் திருப்ப மரோசி  
பெருமந்தம் வாந்தி பொருமல் - கரப்பானும்  
மெய்யாய் பரவு மலம் மெத்தவரும் போகமுண்டாங்  
கொய்யா பழத்தினாற் கூறு

#### **முட்டை - Gallus Domesticus**

வாதபித்தஞ் சேர்ப்பிக்கும் வன்றோடம் புண்ணாக்குந்  
தாதுவை மெத்த தழைப்பிக்கு - மோது  
கபத்தை யடக்குங் கரப்பானுண்டாக்கு  
மிபத்தையுறுங் கோழிமுட்டை யென்

#### **உப்பு**

சொட்டை நரை திரை துட்டநீர் பம்பு புண்  
மட்டற்ற நாவறட்சி வாதரத்தம் - குட்டமுண்டாம்  
தேகவன்மை தேயும் திருவேதினம் அதிக  
மாகவுப்பை யுண்டாகக் கறி.

#### **கத்தரி - Solanum Melogena**

பண்டு மாண்ட கிரந்தியைப் பாதிக்கும்  
உண்ட கைக்குந் தினவை யுண்டாக்கிவிடும்  
நண்டு கட்டுங் குரங்கென நாளுமாங்  
கண்டு விட்டது கத்தரிக் காயதே

#### **மாம்பழம் - Magnifera indica**

தின்றாற் றினவெடுக்குந் தீபனம் போம் நெஞ்செரிவாம்  
அன்றே விழிநோய் அடருங்காண் - நுன்றிமிக  
வாதகரப்பானும் வன் கிரந்தியும் பெருகுஞ்  
சூதக் கனியின் சுகம்.

#### புளி - **Tamarindus Indica**

புத்தியும் மந்தமாகும் பொருமியே உடலுமூதும்  
பத்தியம் தவறும் சந்தி பாதமாம் சுரங்கள் வீறுஞ்  
சர்த்தியும் பித்துந் தீரும் தனுவெனும் வாத மேறும்  
மத்தியந்த தாதுபுஷ்டி வருந்திரை நரை புளிக்கே  
இவற்றுடன் கம்பு, வரகு. காரரிசி, வாழைக்காய், தடியங்காய் இவற்றையும்  
நீக்க வேண்டும்.

- பதார்த்த குண சிந்தாமணி

- ❖ எளிதில் சீரணிக்கும் உணவு வகைகளை எடுத்துக் கொள்ளல் நலம்.
- ❖ மரக்கறி உணவு, பால் மற்றும் பால் பொருள்கள், சத்துள்ள உணவுகள் உட்கொள்ளலாம்.
- ❖ மசாலை பொருள்கள் (Spicy Foods) மணப் பொருட்கள், போதைப் பொருட்கள், காரப் பொருட்கள் நீக்க வேண்டும்.

#### MODERN ASPECTS

# **ECZEMA**

## **Definition**

Dermatitis and eczema is non contagious inflammation of the skin characterized by erythema, scaling, oedema, vesiculation and oozing.

Eczema has been used as a descriptive term since the sixth century.

Eczema is a Greek word (Ec-means “out”, zeo-means “boil”). The whole word implies “boil out”.

Eczema is a specific type of allergic cutaneous manifestation of antigen-antibody reaction.

## **Aetiology**

Basically, two factors cause dermatitis and eczema.

Firstly, all allergic or sensitive skin. Secondly, exposure to an irritant. The dermatologist Darier has correctly said that,

“There is no eczema but an eczematous patient”

The general predisposing causes are

## **Age**

Eczema sometimes occurs in infancy, at puberty and at the time of menopause.

## **Genetic & familial predisposition**

There is usually a personal or family history of allergy, viz asthma, eczema and hay fever.

## **General debility**

By lowering resistance of the individual predisposes to eczema.

## **Climate**

Climate extremes like heat and severe cold.

## **Psychological stress**

**Local factors**

Xeroderma or ichthyosis, a greasy skin hyperhidrosis, varicose veins. Direct contact with pet and domestic animals (especially their saliva or fur) and indirect contact with animal dander.

Rough, scrappy, tight clothing, especially clothes made of wool (or) stiff fabrics.

The frequent use of soaps and cleaning products that tend to give lack of normal shiny of the skin.

**FOOD AS ALLERGENS****a) Animal sources**

Cow's milk – Casein and  $\beta$  lactoglobulin are known to be the major allergen. Egg white is the allergising factor.

Any species of fish can responsible for allergic reactions

Meats of all kinds –It has been observed that in cases of hypersensitiveness to the meat of a certain animal, the liver, pancreas, kidney and brain.

**b) Plant sources**

Wheat flour – allergic reaction due to wheat gluten

Some workers in glue factories using soya flour as an ingredient of glue, develop severe allergic symptoms.

Peas, beans and lentils have been reported to produce allergic reactions in some individuals.

Consumption of edible mushrooms sometimes may cause allergic reactions.

Fats and oils have been found to produce allergic symptoms in some individuals.

The vegetables which have been found to produce allergic reactions in some individuals are carrot, spinach, cabbage, onion, garlic, sweet potato, cauliflower and pumpkin.

Among the fruits, strawberries, bananas, oranges, grapes and apples are the principal offenders.

Occasionally allergic reactions can occur due to consumption of pears, cherries, plums, gooseberries.

Citrus fruits and tomatoes may cause atopic allergy.

### **Beverages**

Allergic actions are due to traces of foreign substances derived from food materials employed in the preparations or clarifying the beverage, such as

- Barely malt and yeast in beer
- Rye corn and wheat in whisky
- Fish, glue, egg white or yeast in cheap white wine and champagne

### **Food contaminants as allergens**

For example preservations, insecticides and insect excreta or fragments may act as allergens.

Nor dihydroguairesic acid (NDGTA) is an antioxidant used in food facts.

*- Dietetics 4<sup>th</sup> edition*

*B. Srilakshmi*

### **Cosmetics**

Common ingredients in cosmetics such as perfumes, face creams, deodarents, hair dye, shampoos, parabens, benzocaine, lanolin, thimersol, etc.

**Clothing**

Rubber chappals, spectacle, resins, frames, furs, nylon, synthetic dyes. Most buttons are formaldehyde resins, epoxy resins are all common sensitizers.

**Medicaments**

This include Sulphonamides, Penicillin, Streptomycin, Cocaine, Tincture, Benzoin, Detol, Phenergon cream & Sticking plaster etc.

**INDUSTRIAL AND OCCUPATIONAL AGENTS****Occupational**

Agriculturists	-	Plants, weeds, fertilizers
Automobile	-	Oil, petrol, solvent, grease, paints
Building workers	-	Cement, lime, paints, insecticides,
Chemical and		
Pharmaceutical industries	-	Dyes, Chemicals, explosives, solvents, disinfectants, detergents
Coal miners	-	Mechanical injuries
Dentists	-	Cocaine and its derivatives
Engineering industries	-	Cutting oils, solvents
Housewives	-	Soaps, detergents, vegetables, fruits, nickel , polishes, artificial flavours
Nurses and Doctors	-	Iodine, streptomycin, chlorpromazine, tincture , benzonin
Photographers	-	Hardeners, solvents, glass, cellulose esters
Rubber workers	-	Additives like TMT, MBT, dyes, glues, oils
Tannery workers	-	Chromate, formaldehyde, arsenic, alkalies, acids.
Textile workers	-	Formaldehyde, solvents, dyes



### **Ten common allergens come across in practice**

1. Paraphenylene diamine
2. Nickel sulphate
3. Potassium dichromate
4. Parthenium hysterophorus
5. Nitrofurazone ointment
6. Neomycin sulphate
7. Formaldehyde
8. Turpentine
9. Garlic
10. Epoxyresin

### **EXACERBATING FACTORS**

- ❖ Irritants - Physical, chemical or electrical
- ❖ Sensitizers - Plants, clothing, cosmetics, medicaments, infection, diet and focal sepsis.
- ❖ External infections - Streptococci, Staphylococci, fungus.
- ❖ Diathesis - Allergic, Xerodermic, hyperhidrotic or seborrhoeic
- ❖ Drugs - State of local or general nutrition
- ❖ Climate - Temperature and humidity
- ❖ Mental and emotional conflicts.
- ❖ Internal septic focus shedding toxins or causing bacteraemia
- ❖ Scratching, Chemical trauma, Climate, Stress and Strains keep the process going with the result that eczema becomes chronic

It is still controversial whether the endogenous factors like diet, emotional strain and stress, focal sepsis, state of digestion, nutrition are more important than exogenous factors like infection, irritants and sensitizers (or) vice versa.

In practice mixed eczemas are much more common than pure entities. History and clinical observation are very important in establishing the exact etiological diagnosis.

### **Immunology**

Immunology is a science which deals with the body's response to antigenic challenge.

These mechanisms are involved in the protection of the body against infectious agents but periodically they can also cause damage.

Sensitization develops when a different clone of T-lymphocytes is activated. The sensitized T-lymphocytes yield two sub populations of lymphocytes.

1. Memory cells that are responsible for the persistence of contact allergy.
2. Effector cells that initiate the allergic response when appropriately challenged.

### **PATHO PHYSIOLOGY**

#### **Allergy & hypersensitivity**

Both terms are synonyms.

The concept of hyper sensitivity was first introduced by Portier and Richet.

The term allergy was first used by Von Pirquit (1874 - 1929) to denote changed reactivity of the body to outside chemicals.

Changed reactivity in this context means that the body behaves in a particular way when it is exposed to a chemical

substance known as 'Allergen' for this first time, but changes the nature of its reaction when it is exposed for the second and subsequent times. This change is due to proteins known as antibodies.

The moment, the allergen IgE combination stimulates the mast cells which unload their chemical contents into the surrounding tissues. These chemicals (mediators of allergy) cause the manifestations of allergy such as erythema, wheal and flare reaction. Flare is due to dilatation of arterioles by local axon reflex and the liberation of vasodilator substances like histamine and its by products like serotonin, bradykinin, acetylcholine from the injured cells like mast cells and basophils etc., The manifestation of hypersensitivity may be immediate (or) delayed type.

### **Cutaneous Allergy**

In the skin there are two important but different allergic reactions occur.

#### **Dermal reaction**

- ❖ Dermal reaction is commonly seen in urticaria.
- ❖ The causative antigen reaches the skin through ingestion, inhalation or injection of protein substances and the reacting antibodies, circulate in the serum.
- ❖ Allergic reaction takes place in the dermis
- ❖ Intra dermal tests (scratch) shows reactivity

#### **Epidermal reaction**

- ❖ It is seen in allergic dermatitis or eczema.
- ❖ The causative substance reach the skin by contact, Intra dermal allergic tests are negative.
- ❖ But patch test shows reactivity

- ❖ Allergen + Epidermal protein – Antigen formation (probably in lymph glands)
- ❖ Circulation - Fixed in epidermal cells on next occasion
- ❖ Allergen + Antibodies – Eczematous reaction (In epidermis)
- ❖ A severe local reaction may result in auto-intoxication & dissemination of eczematous reaction to distant parts.

### **Status Eczematicus**

It is believed that in case of severe allergic states, a state may develop when the patient becomes hypersensitive to even unrelated substances resulting in status eczematicus comparable to status asthmaticus in practice of internal medicine.

### **Reaction time**

It is the time taken by a sensitized individual to manifest a clinical reaction following contact with a known sensitizer.

It is usually 12-24 hours but may vary from one hour to 120 hours.

### **Dissemination reaction**

It is a fleeting erythematous macular reaction involving the face and flexures, caused by the escape of lymphokines in the circulation resulting in vasodilatation at distant site.

### **Cause of recurrence**

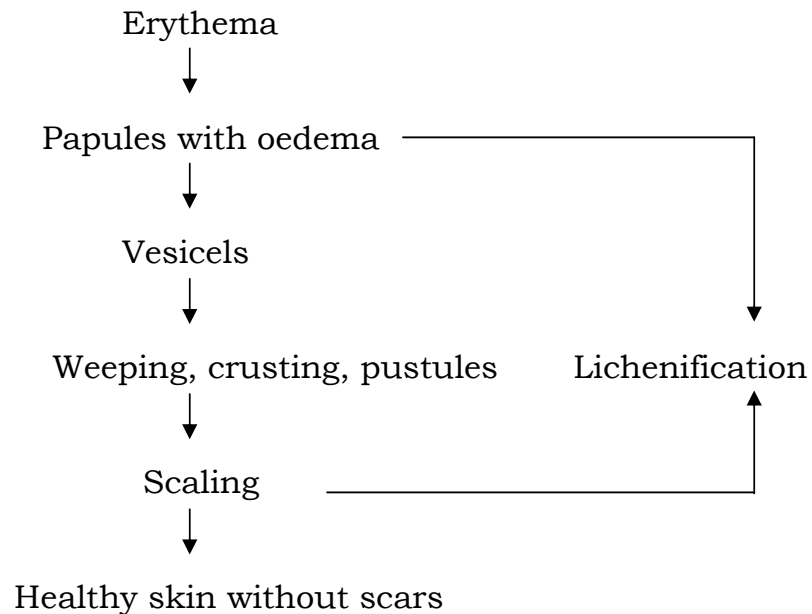
Flare reaction is reactivation of a previously healed site of a contact dermatitis or a positive patch test reaction following renewed challenge or exposure to the same allergent at another site. This is because of persistence of sensitised lymphocytes at the site of earlier reaction, which react to minute amounts of antigen sometimes escape in the circulation from the new site and find its way to the old site

Further it must be realised that Dermal or epidermal sensitization affects the entire integument and this sensitization once acquired is life – long. According to some, a degree of bloating in reactivity may be seen with the passage of time

### **CLINICAL FEATURES**

Eczema is a specific type of allergic subcutaneous manifestation of antigen antibody reaction. It is characterized by superficial inflammatory oedema of the epidermis associated with vesicle formation. Itching varies from mild to severe paroxysms which may even interfere with work and sleep. The natural history of eczema is represented as follows

### **HISTORY OF ECZEMA**



## CLASSIFICATION

There are two groups of eczema.

<b>Exogenous</b>	<b>Endogenous</b>
Irritant	Atopic
Allergic	Seborrhoeic
Photodermatitis	Discoid
	Asteatotic
	Gravitational
	Neurodermatitis
	Infectious eczematoid

### **Exogenous Eczema**

#### **Irritant eczema**

Detergents, alkalies, acids, solvents and abrasive dusts are common causes. Irritant eczema accounts for the majority of industrial cases and work loss.

The elderly, those with fair and dry skin and those with an atopic background are especially vulnerable. Napkin eczema in babies is common and due to irritant ammonical urine and faeces.

Strong irritants elicit an acute reaction at the site of contact where as weak irritants most often cause chronic eczema, especially of the hands after prolonged exposure.

#### **Allergic contact dermatitis**

##### **Definition**

Allergic contact dermatitis is an eczematous rash that develops after contact with an agent due to delayed cellular hypersensitivity.

## **Aetiology (Allergens)**

They are classified into two groups

- ❖ Non proteins - Dyes, oils, resins, coal for derivatives, rubber, cosmetics and chemicals.
- ❖ Proteins - Bacterial products, fungi and parasites are included in this group.

Persons may be exposed to allergens for years before finally developing hypersensitivity. The sensitized area although usually generalized may be strictly localized.

Eg: Eczema of the ear lobes wrists and back due to contact with nickel in costume jewellery.

<b>Some common allergens</b>	
Nickel	Jewellery, Jean studs, bra clips
Dichromate	Cement leather, matches
Rubber chemicals	Clothing, shoes, tyres
Colophony	Sticking plaster, collodion
Paraphenylene diamine	Hair dye, clothing
Balsam of peru	Perfumes, citrus fruits
Neomycin, benzocaine	Topical applications
Parabens	Preservative in cosmetics and creams
Wool alcohols	Lanolin, Cosmetics, creams
Epoxy resin	Resin adhesives

## **Photo dermatitis**

Photo dermatitis means photo sensitization of the skin after contact with plants which have either photo toxic or photo allergic action.

Dermatitis in this condition, is confined to the exposed parts of the body viz, face, neck, “v” of the chest, hands and external surfaces of the fore arms and dorsum of foot and the adjoining parts of legs.

The common causes of photo dermatitis are,

- ❖ Drugs like sulphonamides, chlorpromazine, Promethazine, declamycin, terramycin, chlorthiazide, diuretic, different hypotensive and anti diabetic drugs.
- ❖ Foods like figs and buck wheat.
- ❖ External application of bithionol etc.,
- ❖ Plants and their products like parsnips, cow parsnips meadow grass mustards, lime oil, psoralea, bergmot oil etc.,

### **Endogenous eczema**

There is no evidence of external irritants or allergens in endogenous eczema part of the body becomes sensitized to internal body products, toxins from focal sepsis, metabolites that are products of digestion (or) elements of diet and drugs with or without familial predisposition to this list should be added psychosomatic influences.

### **Atopic eczema**

It is also called asthmatic eczema syndrome

Atopy (out of - place - ness) is a genetic predisposition to form excessive IgE which leads to a generalised and prolonged hypersensitivity to common environmental antigens.

Atopic individuals manifest one or more of a group of diseases that includes asthma, hay fever, urticaria and this distinctive form of eczema.



## **Aetiology**

The inheritance of atopic eczema is controversial. The disorder is concordant in 86% of monozygotic twins but in only 21% of dizygotes.

Atopic diseases show maternal imprinting i.e., they are inherited more often from the mother than from the father.

## **Distribution and character of rash**

### **Infancy**

The eczema is often acute and involves the face & trunk.

The napkin area is frequently spared.

### **Childhood**

The rash, settles on the back of the knees, front of the elbows, wrists & ankles.

### **Adults**

The face and trunk are once more involved lichenification is common.

## **Diagnostic criteria**

- ♣ Itchy skin and at least three of the following.
- ♣ History of itch in skin creases (or cheeks if < 4 years)
- ♣ History of asthma / hay fever (or in a first – degree relative if < 4 years)
- ♣ Dry skin (Xeroderma)
- ♣ Visible flexural eczema (cheeks, forehead, outer limbs if < 4 years)
- ♣ Onset in first 2 years of life

### **Seborrhoeic Eczema**

This condition which is characterised by a red scaly rash classically affects the scalp (dandruff) central face, nasolabial folds, eyebrows and central chest.

It is due to pityrosporum ovale infection of the skin.

In its milder forms it is the same as dandruff where as when severe it may resemble psoriasis.

Sebum may be permissive for the development of the rash.

Seborrhoeic eczema is a feature of AIDS and can be very severe in this condition.

### **Discoid eczema**

Synonym : Nummular eczema

This is a common form of eczema recognised by discrete coin-shaped lesions of eczema seen on the limbs of young men associated with alcohol excess, and of elderly men.

It can occur in children with atopic eczema and tends to be more stubborn to treat.

### **Aetiology**

- Psychogenic stresses
- Focal sepsis
- Food allergies
- Alcohol
- Debility and drugs

A dry skin and cold weather may be associated with it.

Sometimes it may be associated dyshidrosis of palms and soles, and discoid patches of keratoderma.

### **Asteatotic eczema**

This is frequently seen in the hospitalized elderly especially when the skin is dry, low humidity caused by central heating over washing and diuretics are contributory factors.

**Gravitational (stasis) eczema**

Persistent inflammation of the skin of the lower legs commonly associated with venous incompetency.

The eruption is usually localized to the ankle, where oedema, erythema, mild scaling and brownish discoloration occur. Secondary bacterial infection and eventual ulceration may occur. The cause is mainly due to perivascular fibrin deposition and abnormal small – vessel vaso constrictive reflexes.

**Neuro dermatitis**

Synonym : Lichen simplex chronicus

Affecting more commonly neurotic people.

**Definition**

This condition may be defined as the lichenification process resulting from chronic scratching and rubbing of the skin under stress and anxiety.

**Clinical features**

The skin become thickened, infiltrated and pigmented. The criss cross markings become more prominent. Margins are irregular & usually well defined.

**Common sites**

The nape of the neck, arms, ano-genital area, back of knees, legs and ankles.

**Pompholyx (dyshidrotic eczema)**

Recurrent vesicles and bullae occur on the palms, palmar surface of the fingers and soles.

It is most common in adult life (20-40 yrs)

Provoking factors

- Heat
- Stress
- Nickel ingestion

But is often idiopathic.

### **Infectious eczematoid dermatitis**

Synonym: Infective eczema

This results from sensitization to certain organisms like streptococci, staphylococci, dermatophytes and yeast organisms.

### **Clinical features**

Characterised by their slow development no vesiculation is usually evident a crust is formed instead. The patch or patches are sharply defined and there is no erythematous halo.

Sites: Body folds, hair follicles.

### **Sub divisions**

#### **1) Post traumatic infective eczema**

It starts with a crack in the integrity of the skin brought on by an injury, a blister an insect bite or exposure to a cold wind etc.

Eczematization secondary to acute tinea, particularly tinea pedis is frequently seen. It starts from digital spaces and spreads to the dorsum of the foot or the soles.

#### **2) Follicular infective eczema**

It involves hairy region like the scalp, beard and legs. It starts usually with pityriasis capitis which gets complicated by one (or) several itchy patches of oozing, pits and crusting. The eczema spread to fore head, retro auricular folds and cheeks. Streptococi, staphylococci and less so Pityrosporon organism are the causatives.

### **3) Flexural infective eczema**

The flexures are the sites of predilection. It starts with a crack in the depth of the fold and two opposing surfaces are equally affected. The inner part looks moist and red only at the periphery is crusting clearly evident.

### **Infantile eczema**

This occurs in children between the ages of three months and two years. It usually starts on the cheeks, spreading slowly to forehead, chin, scalp, arms, trunk, legs, buttocks and in the groins, napkin rash like dermatitis may develop.

### **Etiology**

Dietetic allergies may play an important role in the causation

### **Clinical features**

Characterized by erythema, vesicles, exudation and crusting pruritus is a prominent symptom, it comes in spasms. To start with the infants are usually plump.

### **Types**

1. With high familial predisposition to an allergic disease –  
The atopic variety
2. Without familial predisposition – Simple variety

### **Investigation of Eczema**

#### **Patch test**

Patch tests detect type IV (delayed or cell-mediated ) hypersensitivity.

It is common practice for a battery of around 20 common antigens, including common sensitizers such as nickel, rubber and fragrance mix to be applied to the skin of the back under aluminium discs for 48 hours.

The sites are then examined for a positive reaction 24 hours later and possibly again a further 24 hours later.

The positive test is revealed by the development of an eczematous patch with erythema swelling and vesicles at the site of application.

Patch test reaction is graded in the following degrees

+	-	Only redness
++	-	Marked redness and swelling
+++	-	Marked redness , swelling and papules
++++	-	redness, oedema and vesicles

### **Specific IgE**

Specific IgE levels to antigens can be measured in serum by a specific radio allergic sorbent test (RAST)

These are occasionally performed to support diagnosis of atopic eczema and to determine specific environmental allergens, eg. pet dander, horse hair, house dust mite, pollens and foods.

### **Prick tests**

Prick tests are a way of detecting cutaneous type I (immediate) hypersensitivity to various antigens such as pollen, house dust, mite or dander.

### **Bacterial and viral swabs for microscopy and culture**

These are useful tests in suspected secondary infection skin swabs for bacteriological assessment will invariably reveal the presence of bacteria. In the case of recurrent impetigo in a child with atopic eczema, bacterial swabs should be taken from carrier sites (axillae and groin) from both the affected individual and household members.

### **Hints of diagnosis for all eczemas**

1. Nature of the lesions- size, shape, itching, number of papules, pustules, erythema etc.,
2. Distribution – sites of lesion.
3. History of occupation.
4. History of exposure to allergens – i.e. Chemicals, plants, soap, etc.,
5. Personal and family History of such diseases – e.g atopic or allergic eczemas.
6. Climate – eg: Dyshidrosis occurs at the change of seasons particularly in spring, summer.
7. Patch tests ( allergy test) in allergic/ atopic eczemas.
8. Biopsy in rare cases when the lesions do not respond to treatment.

### **Prognosis of eczema**

Dermatitis and eczema are as rule curable conditions. Eczema are ineffective except when they are leave scars. The patient needs reassurance of these points.

It must be remembered that epidermis is an ectodermal structure and so takes time to heal. Energetic treatment is to be strongly discouraged.

Acute eczemas heal readily in about 1-4 weeks with treatment.

Chronic eczemas in which anatomical and functional changes set in take time to disappear.

Disseminated and generalized eczemas are not only slow to heal, but are accompanied by ill health. Infantile and atopic eczemas are trouble some and uncomfortable.

The former lasts till the age of twenty five or even though life. Its course is marked by spontaneous remissions and exacerbations.

Psychogenic stresses climate extremes and poor health aggravate eczema. The cure of these conditions is retarded in tropical countries by heat, humidity and the prevalent unhygienic conditions.

- Roxburgh's common skin diseases – Ronald Marks
- Practice of Dermatology – Dr. P.N. Behl (Ninth Edition).
- [www.skincarephysicians.com](http://www.skincarephysicians.com)
- [www.medicinenet.com](http://www.medicinenet.com)



## **MATERIALS AND METHODS**

The clinical study on Vatha karappan was carried out in the inpatient ward of **Ayothidoss Pandithar Hospital of National Institute of Siddha, Chennai – 47.**

Approach towards the patients was made according to the signs and symptoms of Vatha karappan as mentioned in siddha literature.

### **Selection of cases**

For this clinical study 30 cases were selected from both sexes of varying age groups. Out of 30 patients selected 19 were admitted in the inpatient ward and treated, and 11 patients were from o.p. department.

### **Evaluation of clinical parameters**

During admission a detailed clinical history with details of family history, allergic history, aggravating factors, occupation, socio-economic status, dietary & personal habits and associated history such as bronchial asthma and hay fever was taken from the patients. The cardinal signs & symptoms like itching, erythema, vesicles, oozing, pain, oedema, crusting, scaling and ulcers were taken as criteria for the Vatha karappan cases.

### **Diagnostic aspects of Siddha**

Separate individual case sheets were prepared on the basis of siddha methodology i.e. poriyal arithal, pulanal arithal, vinathal, envagai thervugal, ezhu udal kattugal, thinai, paruva kaalam, etc., .

### **The clinical investigations**

The modern diagnostic investigations such as Blood tests for TC, DC, ESR, HB, sugar and urine analysis for sugar.

After discharge, all the 19 patients were advised to attend outpatient department for further follow up.

Pharmacological analysis of the trial drug was conducted at the pharmacology department, **A.J College of pharmacy, Chennai-119.**

### **Management**

“Viresanathal vatham thazhum” ie, purgation lowers vatham and so the patients were advised to take Meganatha Kuligai 1-2 Tablets with hot water (early morning in empty stomach) before starting treatment with trial drug.

### **Trial Drugs**

- 1) Vathakarappan chooranam - 1-2 gm twice a day (morning and evening) with palm Jaggary.
- 2) Amanakku ennai – Applied externally over the affected areas.

## **OBSERVATION AND RESULTS**

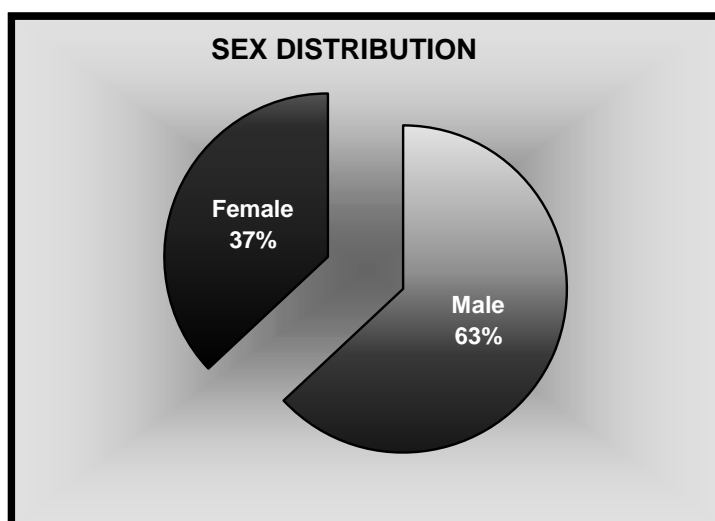
Results were observed with respect to the following criteria:

- Sex distribution
- Age distribution
- Kaalam distribution (life span)
- Occupational status
- Socio economical condition
- Diet
- Seasonal
- Thinaai (land and place)
- Gunam (characters)
- Mode of onset
- Aetiological
- Clinical features
- Associated history
- Duration of the illness before treatment
- Distribution of Uyir thathukkal
- Ezhu (seven) udar kattugal
- Envagai thervugal
- Neerkuri and Neikuri
- Results after treatment

## SEX DISTRIBUTION

Out of 30 patients selected for the clinical study 63% were males and 37% were females.

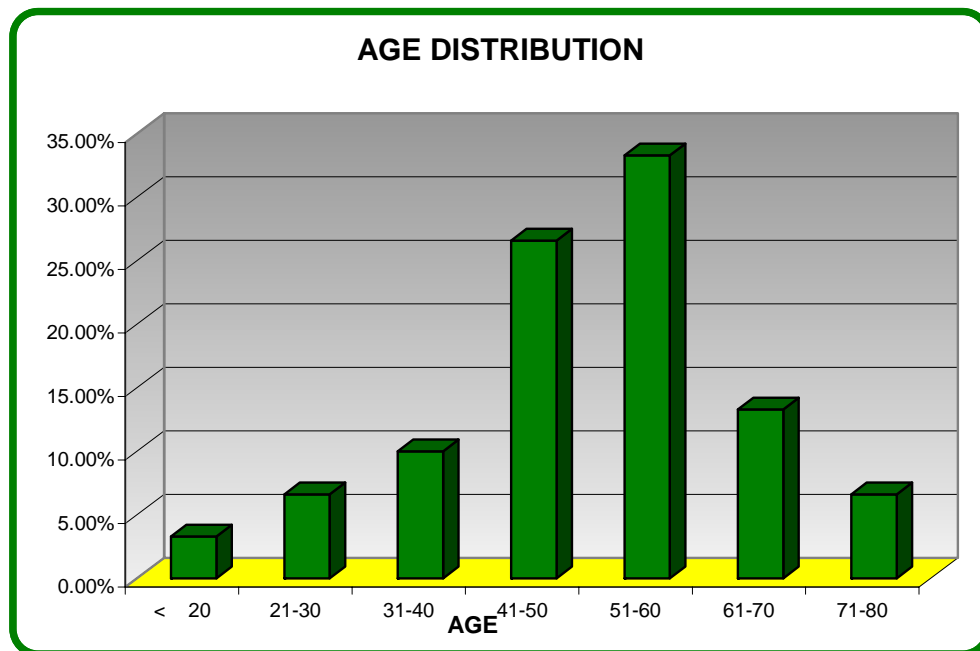
Sl.No .	Sex	No. of cases	Percentage
1.	Male	19	63%
2.	Female	11	37%



## AGE DISTRIBUTION

Out of 30 cases selected for clinical trial, 10 were above the age of 50.

Sl.No.	Age	No. of cases	Percentage
1.	≤ 20	1	3.3%
2.	21-30	2	6.6%
3.	31-40	3	10%
4.	41-50	8	26.6%
5.	51-60	10	33.3%
6.	61-70	4	13.3%
7.	71-80	2	6.6%



### **KAALAM DISTRIBUTION**

30 cases of different age groups were treated and 70% of them were in the pitha kaalam, 20% in kapha kaalam and 10% in vatha kaalam.

<b>Sl.No.</b>	<b>Kaalam</b>	<b>No. of cases</b>	<b>Percentage</b>
1.	Vatha Kaalam (0-33)	3	10%
2.	Pitha Kaalam (34-66)	21	70%
3.	Kapha Kaalam (67-100)	6	20%

### **OCCUPATIONAL STATUS**

Occupation is closely associated with vatha karappan which is evident from the table given below:

<b>Sl.No.</b>	<b>Nature of work</b>	<b>No.of.cases</b>	<b>Percentage</b>
1.	Farmers	8	26.6%
2.	Coolies	4	13.3%
3.	Workers in chemical industries	2	6.6%
4.	House Wives	5	16.6%
5.	Employees of stressful occupations	8	26.6%
6.	Others	3	10%

From the table above, it is learned that farmers and employees of stressful occupations are highly affected.

## SOCIAL, ECONOMICAL CONDITIONS

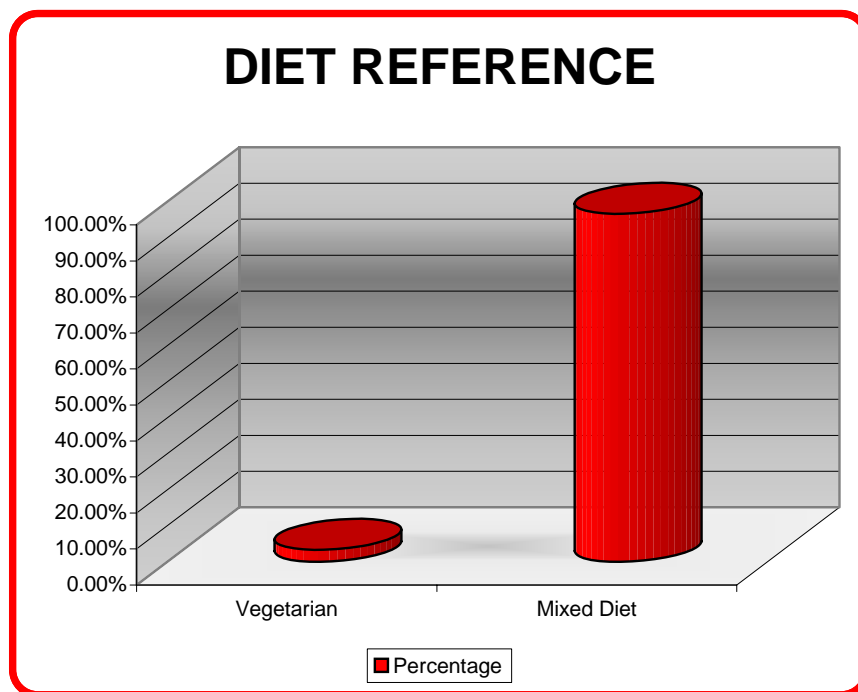
The incidence of the disease was found to be higher in lower economic groups

Sl.No.	Socio-economic status	No. of cases	Percentage
1.	Poor	14	46.6%
2.	Middle	13	43.3%
3.	Rich	3	10%

## DIET

Cases were enquired of their dietary habits and it was noted that 96.6% cases were non-vegetarian and only 3.3% were vegetarian.

Sl.No.	Diet Habit	No. of cases	Percentage
1.	Vegetarian	1	3.3%
2.	Non-vegetarian	29	96.6%



**Paruva Kaalam(Season)**

Out of 30cases the highest incidence was during Koothir kaalam followed next by Munpani kaalam

Sl.No.	Paruva Kaalam	No. of cases	Percentage
1.	Kaar Kaalam	-	-
2.	Koothir Kaalam	11	36.6%
3.	Munpani Kaalam	9	30%
4.	Pinpani Kaalam	5	16.6%
5.	Elavenil Kaalam	5	16.6%
6.	Muthuvenil Kaalam	-	-

**THINAI (Land)**

100% of cases reported from the Neithal Thinai.

**GUNAM**

All the 30 cases were of Rajo gunam.

**MODE OF ONSET**

Out of 30 cases 80% of cases were found to be chronic sufferers.

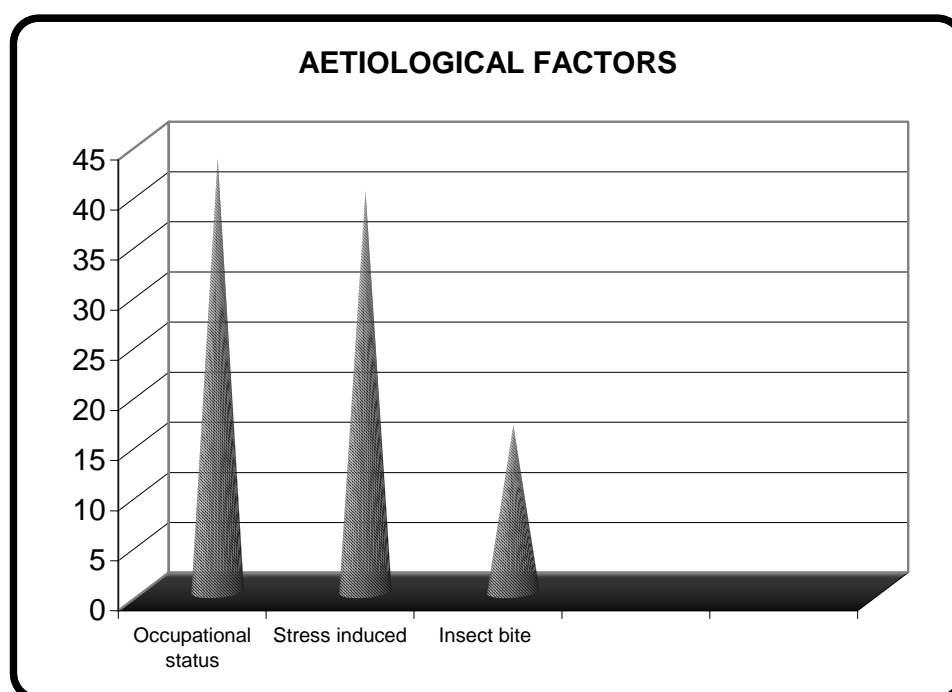
Sl.No.	Mode of Onset	No. of cases	Percentage
1.	Acute	6	20%
2.	Chronic	24	80%



## AETIOLOGICAL FACTORS

When the 30 cases taken for study were observed, occupation, stress and insect bite were the main causative factor for the disease. The incidents were as follows;

Sl.No.	Aetiology	No. of cases	Percentage
1.	Occupational status	13	43.3%
2.	Stress induced	12	40 %
3.	Insect bite	5	16.6 %



## CLINICAL FEATURES

Sl.No.	Clinical features	No. of cases	Percentage
1.	Constipation	2	6.6%
2.	Erythema	12	40%
3.	Itching	30	100%
4.	Vesicles	23	76.6%
5.	Oedema	30	100%
6.	Pustules	9	30%
7.	Oozing	26	86.6%
8.	Scaling	9	30%
9.	Pain	30	100%
10.	Ulcers	12	40%
11.	Lichenification	20	66.6%

Table shows that itching, pain and oedema were present in all the 30 cases

## ASSOCIATED HISTORY

Since vatha karappan is an immunological disorder other associated condition such as bronchial asthma, Urticaria and hay fever were noted in all cases. other commonly encountered conditions like hypertension and diabetics were also noted as shown below.

Sl.No.	History	No. of cases	Percentage
1.	Bronchial asthma	-	-
2.	Hay fever	-	-
3.	Urticaria	5	16.6%
4.	Diabetes	2	6.6%
5.	Hypertension	1	3.3%

#### **DURATION OF THE ILLNESS BEFORE TREATMENT**

<b>Sl.No.</b>	<b>Duration in months</b>	<b>No. of cases</b>	<b>Percentage</b>
1.	1-3 months	5	16.6%
2.	3-6 months	10	33.3%
3.	6 months – 1 year	6	20%
4.	1 – 2 years	5	16.6%
5.	more than 2 years	4	13.3%

#### **DISTRIBUTION OF UYIR THATHUKKAL**

The derangement of Thathu in Vatha Karappan is tabulated as follows

#### **DERANGEMENT OF VATHAM**

<b>Sl.No.</b>	<b>Vatham</b>	<b>No. of cases</b>	<b>Percentage</b>
1.	Piranan	-	-
2.	Abanan	2	6.6%
3.	Viyanan	30	100%
4.	Uthanan	-	-
5.	Samanan	30	100%
6.	Nagan	-	-
7.	Koorman	-	-
8.	Kirukaran	-	-
9.	Devethathan	-	-
10.	Thananjeyan	-	-

**DERANGEMENT OF PITHAM**

<b>Sl.No.</b>	<b>Pitham</b>	<b>No. of cases</b>	<b>Percentage</b>
1.	Anar pitham	2	6.6%
2.	Ranjagam	30	100%
3.	Sathagam	-	-
4.	Alosagam	-	-
5.	Prasagam	30	100%

**DERANGEMENT OF KAPHAM**

<b>Sl.No.</b>	<b>Kapham</b>	<b>No. of cases</b>	<b>Percentage</b>
1.	Avalambagam	-	-
2.	Kilethagam	-	-
3.	Pothagam	-	-
4.	Tharpagam	-	-
5.	Santhigam	13	43.3%

**EZHU (SEVEN) UDAR KATTUGAL**

The seven udar kattugal which account for the normal body structure, get affected in pathological conditions. They are tabulated below

<b>Sl.No.</b>	<b>Types of udar kattugal affected</b>	<b>No. of cases</b>	<b>Percentage</b>
1.	Saaram	30	100%
2.	Senneer	30	100%
3.	Oon	26	86.6%
4.	Kozhuppu	26	86.6%
5.	Enbu	-	-
6.	Moolai	-	-
7.	Sukkilam / Suronitham	-	-

## ENVAGAI THERVUGAL

In the siddha system of medicine eight investigative procedures were followed for clinical approach and diagnosis. These methods were strictly followed in all the cases and observations noted.

Sl.No.	Type of investigations	No. of cases	Percentage
1.	Naa	-	-
2.	Niram	30	100%
3.	Mozhi	-	-
4.	Vizhi	-	-
5.	Malam	2	6.6%
6.	Moothiram	-	-
7.	Naadi		
	a) vatha pitham	21	70%
	b) vatha kapam	9	30%
8.	Sparisam	30	100%

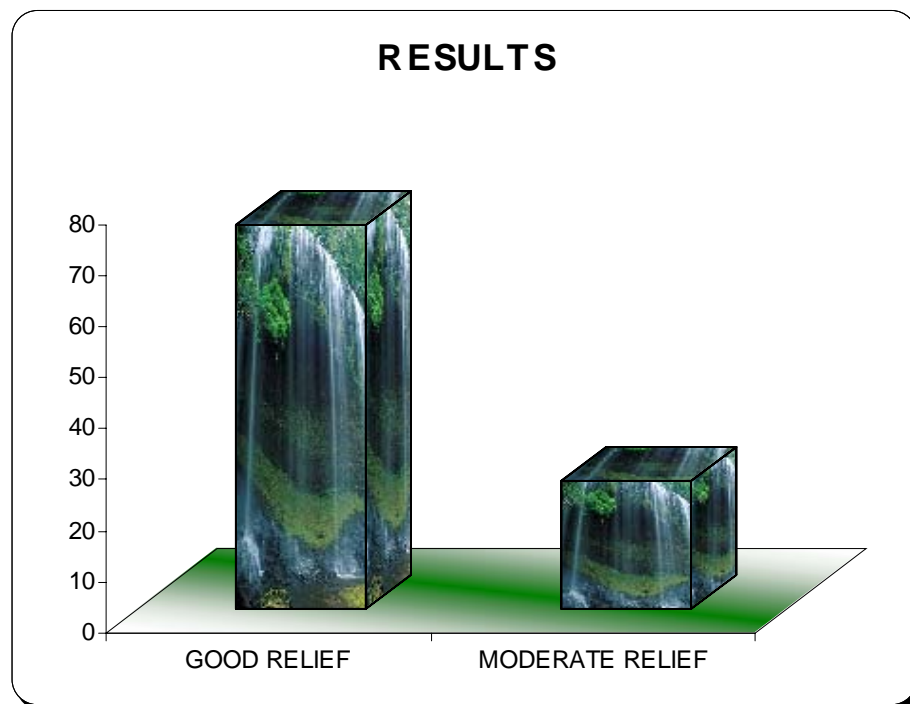
## NEERKURI, NEIKKURI

Sl.No.	Type of test	No. of cases	Percentage
1.	Neerkuri	30	100%
	“Vaikkol Niram”		
2.	Neikuri		
	a) Muththoththu	2	6.6%
	nitral(kabam)		
	b) Aravena	28	93.3%
	neendathu(vatham)		

## RESULTS AFTER TREATMENT

Out of these 30 cases 20 cases were showed good relief.

Sl.No.	Results	No. of cases	Percentage
1.	Good relief	20	66.6%
2.	Moderate relief	9	30%
3.	No relief	1	3.3%



## LIST OF IP PATIENTS

S.NO	IP. NO	NAME	AGE / SEX	D.O.A	D.O.D	NO.OF DAYS TREATED	RESULT
1.	979	Gopal	77/M	02.12.07	07.01.08	37	C
2.	991	Alphonse	55/M	11.12.07	04.01.08	25	C
3.	992	Subibiramani	45/M	12.12.07	12.1.08	31	I
4.	1135	Kanniyapan	66/M	20.2.08	27.3.08	36	I
5.	1125	Ethiraj	55/M	18.02.08	8.03.08	23	I
6.	1164	Jyothi	46/M	5.3.08	29.3.08	25	C
7.	1082	Arjun	45/M	31.01.08	25.02.08	26	C
8.	1169	Ravi	39/M	10.3.08	9.4.08	30	I
9.	1173	Adaikalam	60/M	10.3.08	29.3.08	20	C
10.	1212	Mani	19/M	27.3.08	5.5.08	40	C
11.	1221	Chinnasamy	45/M	31.3.08	27.4.08	28	N.C.
12.	1254	Subbiramani	65/M	10.4.08	10.5.08	31	I
13.	675	Vasanthi	24 / F	29.12.07	24.01.08	27	C
14.	693	Kanniyamma	60 / F	10.01.08	06.02.08	27	I
15.	716	Sobitham	47 / F	24.01.08	21.02.08	28	C
16.	745	Radha	60 / F	12.02.08	05.03.08	22	C
17.	759	Vijayalakshmi	37 / F	18.02.08	08.03.08	20	C
18.	725	Rani	61 / F	29.01.08	27.02.08	30	C
19.	711	Anjala	57 / F	23.01.08	08.02.08	16	I

C – Cured

NC – No Change

I – Improved

D.O.A – Date of Admission

D.O.D. – Date of Discharge

## LIST OF OP PATIENTS

S. NO	OP NO	NAME	AGE / SEX	D.O.A	D.O.D	NO.OF DAYS TREATED	RESULT
1.	AD 7211	Thabitha	25 / F	21.11.07	29.01.08	48	C
2.	21651	Elisabeth	47 / F	21.11.07	12.01.08	51	C
3.	4427	Vasanthi	44 / F	28.11.07	20.12.06	48	C
4.	AD 9933	Dean Samuvel	42 / M	5.12.07	31.01.08	48	C
5.	AB 976	Pulli Narayana Samy	71 / M	17.11.07	31.03.08	48	C
6.	AA 9122	Jayaraman	60 / M	07.12.07	19.12.07	48	I
7.	AE 5607	Godhandam	59 / M	09.02.08	27.03.08	48	C
8.	AG4693	Muniyamma	55 / F	06.02.08	25.03.08	48	C
9.	AE 7968	Christopher	49 / M	04.02.08	23.03.08	48	I
10.	AE 9599	Subbiramani	65 / M	17.12.07	24.01.08	48	C
11.	AC 7731	Shankar	36 / M	12.12.07	29.01.08	48	C

C-cured;

I-Improved

D.O.A – Date of Admission

D.O.D. – Date of Discharge



**Name :** Subbira mani  
**IP.No :** 992  
**DOA :** 12.12.07      **DOD :** 12.01.08



**Before**



**After**

**Name : Sobitham**  
**IP.No : 716**  
**DOA : 24.01.08    DOD : 27.02.08**



**Before**



**After**

## Clinical laboratory investigations-I.P

### Haematological investigations

SI NO	IP NO	TC(Cumm)		DC (Cumm)								Hb (mg/dl)		Blood Sugar (mgs%)				ESR (mm)			
		BT	AT	BT%				AT%				BT	AT	BT		AT		BT		AT	
				P	L	E	M	P	L	E	M			F	PP	F	PP	1/2hr	1hr	1/2hr	1hr
1.	991	8400	4000	52	42	6	-	53	44	5	-	12.2	14.2	86	100	70	111	13	28	6	12
2.	979	8000	7000	54	40	6	2	50	42	6	2	9.3	8.2	74	110	85	107	40	60	30	60
3.	992	7800	6200	55	42	2	1	50	43	6	1	12.4	12	81	111	68	107	36	70	20	40
4.	675	7600	9000	53	42	4	1	50	43	5	2	12	9.7	67	111	88	104	16	36	45	90
5.	711	5200	7000	50	42	6	2	54	40	4	1	9.7	10.0	96	116	90	100	17	35	10	20
6.	1135	5900	8000	60	38	2	-	54	40	4	2	10.6	12.5	88	154	61	111	9	18	2	4
7.	1173	7000	8000	55	40	5	-	54	42	4	2	13.2	13.0	90	143	62	134	8	16	10	20
8.	1169	6200	8600	56	38	5	1	65	30	5	-	13.6	15	96	153	90	150	2	4	6	12
9.	1164	7800	8000	50	30	2	-	53	44	3	-	14.14	10	70	108	63	92	15	30	4	8

10.	1082	8000	8400	54	40	6	-	50	42	6	-	12.00	12.2	98	100	90	110	20	30	8	12
11.	1125	6800	7800	52	46	2	-	62	36	2	-	12.2	14.4	89	180	72	107	2	4	3	6
12.	1212	7200	7000	56	42	2	-	50	42	4	2	14.5	14.6	60	87	86	116	2	4	10	20
13.	1221	7400	8600	61	31	8	-	56	39	5	-	13	15.5	99	123	94	122	24	48	22	44
14	1254	7600	6600	52	41	7	-	54	43	2	-	11	10	87	153	132	188	22	44	6	12
15.	693	7700	7600	50	38	5	1	50	46	3	1	12.6	12.1	108	166	104	230	30	44	10	22
16.	716	7600	7800	60	35	4	1	53	32	3	1	9.7	10	76	96	90	100	10	25	3	8
17.	725	7600	9600	52	40	6	2	58	38	4	-	12.1	11.4	64	136	90	206	15	32	10	20
18	745	7600	7200	57	38	5	-	56	40	4	-	12.1	12.5	118	254	98	236	20	42	9	20
19	759	7400	8000	54	40	5	1	56	30	2	-	12.1	14.4	70	155	79	110	30	60	40	80

BT-Before treatment ; AT-After treatment; P-Polymorphs; L-Lymphocytes; E-Esinophils; M-Monocytes; F-Fasting; PP-Post prondial.

Anemic-3cases;

Blood sugar level is increased in 4cases;

TC level is increased in 12 cases;

Esinophil level is decreased in 10 cases;

ESR level is decreased in 11cases.

## Clinical laboratory investigations-O.P

### Haematological investigations

I NO	OP NO	TC(Cumm)		DC (Cumm)								Hb (mg/dl)		Blood Sugar (mgs%)				ESR (mm)			
		BT	AT	BT%				AT%				BT	AT	BT		AT		BT		AT	
				P	L	E	M	P	L	E	M			F	PP	F	PP	1/2hr	1hr	1/2hr	1hr
1.	AD7211	8100	8600	50	45	05	-	50	45	5	-	11.9	12.5	-	108	-	110	6	15	7	14
2.	Z1651	6600	8600	46	48	06	-	38	50	08	-	11	11.1	77	116	100	-	30	40	28	54
3.	4427	7600	7400	57	40	03	-	54	40	06	-	12.5	9.2	92	-	75	-	7	6	12	24
4.	AD9933	9800	8600	54	43	02	01	50	40	02	-	16.5	16	85	-	100	-	12	25	8	6
5.	AB976	7600	7300	50	42	06	-	48	50	02	-	7.3	9.2	71	-	78	-	12	24	3	7
6.	AA9122	7400	5900	52	42	05	-	56	40	04	-	12.2	11	79	100	81	108	30	60	18	20
7.	AE5607	5900	7800	50	48	02	-	58	37	05	-	11.7	11.6	66	136	98	-	2	5	6	12
8.	AG4693	7900	8200	52	46	02	-	50	48	02	-	12	13.7	74	114	80	110	12	26	6	10
9.	AE7968	6200	7600	54	40	4	-	60	40	03	-	12.1	12.4	108	-	110	-	7	16	7	10
10.	AE9599	6300	9000	49	46	04	01	60	36	03	-	14.5	12.1	81	111	72	136	4	8	10	20
11.	AL7731	8700	6900	59	38	03	-	50	47	03	-	15.5	15	91	-	74	-	2	4	2	6

BT-Before treatment ; AT-After treatment; P-Polymorphs; L-Lymphocytes; E-Esinophils; M-Monocytes; F-Fasting; PP-Post prondial.  
 Anemic-2cases; TC level is increased in 6 cases; Esinophil level is decreased in 4 cases; ESR level is decreased in 4 cases.

## Urine analysis - OP

SLNO	OPNO	BEFORE TREATMENT		AFTER TRTEATMENT	
		SUGAR		SUGAR	
		FASTING	POSTPRONDIAL	FASTING	POSTPRONDIAL
1.	AD 7211	NIL	NIL	NIL	NIL
2.	21651	NIL	NIL	NIL	NIL
3.	4427	NIL	NIL	NIL	NIL
4.	AD 9933	NIL	NIL	NIL	NIL
5.	AB 976	NIL	NIL	NIL	NIL
6.	AA 9122	NIL	NIL	NIL	NIL
7.	AE 5607	NIL	NIL	NIL	NIL
8.	AG4693	NIL	NIL	NIL	NIL
9.	AE 7968	NIL	NIL	NIL	NIL
10.	AE 9599	NIL	NIL	NIL	NIL
11.	AC 7731	NIL	NIL	NIL	NIL

## Urine analysis - IP

SLNO	IPNO	BEFORE TREATMENT		AFTER YTRTEATMENT	
		SUGAR		SUGAR	
		FASTING	POSTPRONDIAL	FASTING	POSTPRONDIAL
1.	979	NIL	NIL	NIL	NIL
2.	991	NIL	NIL	NIL	NIL
3.	992	NIL	NIL	NIL	NIL
4.	1135	NIL	NIL	NIL	NIL
5.	1125	NIL	NIL	NIL	NIL
6.	1164	NIL	NIL	NIL	NIL
7.	1082	NIL	NIL	NIL	NIL
8.	1169	NIL	NIL	NIL	NIL
9.	1173	NIL	NIL	NIL	NIL
10.	1212	NIL	NIL	NIL	NIL
11.	1221	NIL	NIL	NIL	NIL
12.	1254	NIL	NIL	NIL	NIL
13.	675	NIL	NIL	NIL	NIL
14.	693	NIL	NIL	NIL	NIL
15.	716	NIL	NIL	NIL	NIL
16.	745	NIL	NIL	NIL	NIL
17.	759	NIL	NIL	NIL	NIL
18.	725	NIL	NIL	NIL	NIL
19.	711	NIL	NIL	NIL	NIL

## **DISCUSSION**

For this dissertation study out of 30 patients selected by the author. 19 patients were admitted in the inpatient ward of Ayothidoss Pandithar Hospital of National Institute of Siddha, Chennai. Case sheets were prepared and maintained individually for all the 19 inpatients.

The triggering factors like the climate influences, psychological disturbances, etc., were also studied. Daily observations were made before, during and at the end of the study. The observations are discussed as follows.

### **Sex distribution**

In the study among the 30 cases, 19 were males and 11 were females. According to the Siddha literature, there is no apparent sex predilection in Vatha Karappan.

### **Age distribution**

During this entire study, the prevalence of Vatha Karappan was a very common one affecting the adult age group mainly above 50 years.

### **Kaalam (Life Span) distribution:**

Out of 30 patients

70% of the patients belonged to Pitha Kaalam

20% of the cases belonged to Kapha Kaalam

10% of the patients belonged to Vatha Kaalam

This research study shows that majority of patients were affected in their Pitha Kaalam.

**Occupational status**

Occupational hazards play an important role in causing or aggravating the disease vatha karappan.

**Socio – economic condition**

Out of 30 patients, 14 were belonged to poor economic conditions, Majority of them were ignorant in personal hygiene. Malnutrition, prolonged & persistent exposure to polluted atmosphere, lowered immune responses made them prone to this type of disease.

**Diet**

According to siddha literature the non-vegetarian diet accounts much more for the occurrence of the vatha karappan. Here during the study 96.6% of patients were Non-vegetarians . Again some food stuffs like raggi, bitter guard, brinjal, maize, tomato and fish items can also be causative factors for the vatha karappan. So they were advised to avoid such food items.

**Paruva kaalam(Season)**

Skin diseases have definite seasonal influences. Out of 30 cases, 11 cases (36.6% ) belonged to Koothir kaalam (October to December) , 9 cases ( 30%) belonged to Munpani kaalam (December to February ) , 5 cases (16.6% ) belonged to pin pani kaalam (February to April),and 5cases ( 16.6%) belonged to Elavenil kaalam ( April to June).



**Thinai (Land and place)**

100% of cases belonged to Neithal nilam. This may be due to the environmental pollution caused by the advancement of science & technology, life style and the use of too much of pesticides and chemicals.

**Gunam**

Thirty cases had Rajogunam. From this inference character is very much important in developing disease. This was clearly stated in the siddha system. So control of mind and restoration of normal life style can lead to reduction in the incidence of disease.

**Mode of onset**

During the study 80% cases were observed to be the chronic . Incomplete treatment, failure to follow medical advice and dietary restrictions, psychological strains and changed life style were observed to be the reasons for this disease to become chronic.

**Aetiology**

All types of aetiological factors were observed during the study. Here no positive family history was found. Occupational relevance was observed in 13 cases.

Insect bite (5 cases) and psychological stress and strain (12 cases) were also noted.

**Mukkutram****a) Vatham**

Among the 30 patients Abanan was affected in 2 cases (habitual constipation). Viyanan and Samanan were affected in all cases.

**b) Pitham**

Among 30 cases, Anarpitham was affected in 2 cases (loss of appetite, indigestion) Ranjagam and Prasagam was affected in all cases (due to dryness, roughness and hyperpigmentation of the skin).

**c) Kapham**

Santhigam (joint pain) was affected in 13 cases.

**Ezhu (seven) Udar Kattugal**

Among the 7 udar kattugal, saaram was affected in all cases (depression, anhidrosis, etc) senneer was affected in 100% of cases (papules, vesicles, lassitude, anemia). Oon and kozhuppu were affected ( ulcers, joint pain) in 13 cases.

**Envagai Thervugal**

Among 30 cases, niram and sparisam were affected in all cases. In Naadi nadai, vatha pitham was found in 21 cases and vatha kapham was found in 9 cases.

**Mode of action**

Each and every drug contains five kinds of actions i.e suvai (ஈஃ), gunam (இஃ), veeriyam (ஈஃ), pirivu (ஈஃ) and mahimai (ஈஃ). All these five are based on five elements (pancha boothas) which are present in the drug.

Normalization of the 3 thathus (Vatha, Pitha, Kapha) is a cure to the disease. Karappan occurs as a result of derangement of Kapham. Sangan chooranam had kaippu suvai which brings the deranged kapham to normal.

19 patients were admitted in the inpatient ward to facilitate frequent supervision. All the patients were treated with vatha karappan chooranam (internal) and aamanakku ennai (external) for an average of 20 days. The improvement was observed from the third day onwards in acute and 8-10days in chronic cases. The number of days taken for complete disappearance of the symptoms varied from case to case.

In this study, vatha karappan chooranam (internal) and aamanakku ennai (external) were found to be more effective clinically.

Pharmacological analysis of Vatha karappan chooranam shows

- ❖ Significant anti- histamine action.
- ❖ Moderate acute and chronic anti- inflammatory action.
- ❖ Mild analgesic action.

The patients who had hypertension (one case) and diabetes (2 cases), were already under going allopathic treatment for hypertension and diabetes and were advised to continue the treatment, during the admission period.

It was observed that there were no adverse effects during the entire course of treatment in all the 30 cases.

## SUMMARY AND CONCLUSION

- ❖ The trial drugs were selected from “Agasthiar Ayul vetham” Clinical trial was conducted in 30 cases from both sexes of different age groups.
- ❖ Before starting the treatment careful detailed history was taken.
- ❖ They were treated with ‘Vathakarappan chooranam’ internally and ‘Amanakku ennai’ externally.
- ❖ Along with medication the patients were advised to follow a dietary regimen and to practise pranayama.
- ❖ History, clinical findings, laboratory results, Envagai thervugal and uyir thathukkal were used for the diagnostic purpose.
- ❖ The general improvement in the condition of the patients were observed from the end of the first week itself. On an average of 20 days of treatment, all the patients showed satisfactory relief generally.
- ❖ Most of the patients showed encouraging results.
- ❖ The drugs were found to be free from adverse effects during the entire course of treatment.
- ❖ The herbs are available in almost all season and preparation of medicine is very simple.

Finally the ingredients of this trial drugs are cost effective and this will be helpful in promoting large scale manufacture of the drugs, latering to medical needs of large number of patients.

These merits are essential in promoting this drug in future globally. The author hereby concludes that the skin disease “**Vatha karappan**” can be encouragingly treated with the trial drugs.

## ANNEXURES

### Preparation of the Trial Drug ( Internal)

thjfug;ghd; R+uzk;

NrUk; kUe;Jfs;:

J}Jtis NtH

Xhpjo; NtH

vUf;F NtH

nfhbNtyp NtH

fLf;fha;

fUQ;rPufk;

fhl;Lr; rPufk;

Rf;F

Vyk;

mKf;fpuh

rkmsT

nra;Kiw:

Nkw;fz;l ruf;Ffis Rj;jpj;J ,bj;Jr; rypj;J R+uzpj;Jf; nfhs;sTk;

msT: 1-2 fpuhk; fhiy> khiy ,UNtis cs;Sf;F

mDghdk; : nty;yk; (rkmsT)

jPUk; Neha;: thjfug;ghd;

Mjhuk; - mfj;jpaH MAs; Ntjk;.

### Preparation of the Trial Drug ( External)

Mkzf;F vz;nza;;

NrUk; ruf;Ffs;

nea;

ey;nyz;nza;

Mkzf;F vz;nza;

Ntg;ngz;nza;

Njq;fha; vz;nza;

kQ;rs; nghb – rpwpjsT

nra;Kiw:

Nkw;fz;l vz;nza;fs;> nea;iar; NrHj;J fha;r;rp gpd; mjpy; kQ;rs; nghb NrHj;J  
Mwpa gpd; tbfl;bf; nfhs;sTk;.

**gad;:**

ntspg;gpuNahfkhfg; gad;gLj;.j thj fug;ghd; jPUk;.

**Mjhuk; - mfj;jpaH MAs; Ntjk;.**

## **PREPARATION OF TRIAL DRUGS**

வாதகரப்பான் குரணம்



ஆமணக்கு எண்ணெய்



### INGREDIENTS OF VATHA KARAPPAN CHOORANAM

**Calotropis gigantea (L) R.Br**



**Solanum trilobatum. Linn**



**Elettaria cardamomum**



**Vernonia anthelmintica**



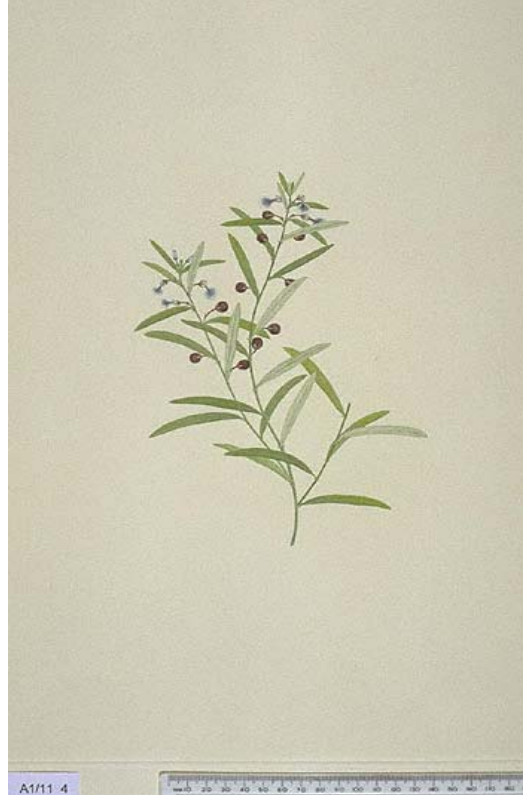
**Terminalia Chebula. Retz**



**Nigella Sativa**



**Hybanthus enneaspermus**



**Plumbago Zeylanica**





**Withania Somnifera****Zingiber officinale.**

## Properties of the Trial Drug

**J}Jtis:**

jhtutpay; ngaH : Solanum trilobatum. Linn

gad;gLk; cWg;G : NtH

Rit - rpWifg;G> fhHg;G

jd;ik - ntg;gk;

gphpT - fhHg;G

nra;if - ntg;gKz;lhf;fp> Nfhioafw;wp> cukhf;fp

**nghJf;Fzk; :**

J}JNt isiaAzj; njhf;fpdpw; nwhf;fpa

Ntijah Nehnayh nka;iatpl; lfYNk

(NjiuaH fhg;gpak;)

**gad;fs;:**

J}JNtisias> fw;gKiwahfNtDk;> fwpahfNtDk; cl;nfhz;L tu clypy; Vw;gl;l  
Neha;fs; ahTk; ePq;Fk;.

இது ஒரு கற்ப மருந்து.

**Constituents:**

The major glyco alkaloid present in the plant  $\beta$  Solamarine

**Uses:**

The plant exhibited anti bacterial antifungal, activities. It showed promising results in the two cancer test systems KB cell and sarcoma 180 in mice.

Indian Materia Medica,

Dr.Nadkarani.

### Xhpjo; jhkiu:

jhtutpay; ngaH	:	Hybanthus enneaspermus
gad;gLk; cWg;G	:	NtH
Rit	:	,dpg;G
jd;ik	:	jl;gk;
gphpT	:	,dpg;G
nra;if	:	clYukhf;fp

### nghJf;Fzk;:

jhJitazlhf;Fe; jdpNkfj;ijj; njhiyf;Fk;

Mjuth Nkdpf; foFjUQ; - rPjk;Nghk;

rPupjo;j; jhkiu tho; nra;a kltdNk

Xupjo;j; jhkiuia Az;

- Fzghlk; %ypif tFg;G

### gad;fs;:

NkfNeha;, Gz; jPUk;. clYf;F moF jUk;. இது ஒரு கற்ப மருந்து.

### Contituents:

There is an alkaloid used in Scorpion sting.

### Uses:

Tonic, diuretic and demulcent.

Indian Materia Medica,

Dr.Nadkarani.

### nfhbNtyp

jhtutpay; ngaH	-	Plumbago zeylanica
gad;gLk; cWg;G	-	NtH
Rit	-	fhHg;G
jd;ik	-	ntg;gk;
gphpT	-	fhHg;G
nra;if	-	Kiw ntg;gfw;wp

### nghJf;Fzk;

“fl;b tpuzq; fpue;jp fhy;fs; miuahg;Gf;  
 fl;bf;R+iy tPf;fq; fho;%yk; - Kl;buj;jf;  
 - mfj;jpaH Fzthflk;  
 “fl;bNa R+iyf;fl;L fUjpL Fwpg;Gz; fpue;jp  
 xl;LNk fuzj;NjhL KWkiuahg;G kd;wp  
 - VL

**gad;fs;:**

,jdhy; fl;b > Gz;> foiy> tspNeha;> miuahg;Gf;fl;b> jPUk;. NkYk;  
 ,jdhy; R+iyf;fl;L> Fwpg;Gz;> fpue;jp> Nkfg;Gz;> newpRuk; KjypaitAe; jPUk;.

### **Constituents**

Plumbagin, Free glucose, Fructose and Enzymes like Protease and Invertase.

### **Uses:**

Root reduced to a paste is applied to abscesses with the object to opening them. With milk, vinegar, or salt and water the paste may be applied in leprosy and other obstinate skin diseases unhealthy ulcers, scabies etc. Plumbagin has well marked antiseptic properties.

Indian Materia Medica,

Dr.Nadkarani.

### **எருக்கு**

jhtutpay; ngaH : Calotropis gigantean (L) R.Br

gad;gLk; cWg;G : வேர்

சுவை - கைப்பு, காரம், இனிப்பு

தன்மை - வெப்பம்

பிரிவு - கார்ப்பு

nra;if : உடற்தேற்றி, கோழையகற்றி

### **பொதுக்குணம்**

“மன்னனையுங் கையெடுக்க வைத்தெயிற்றி னேயகற்றி  
 யுன்னு பிணிப்பணியை யோட்டுதலாற் - சொன்னேன்  
 எருக்கெனவே பூமி யினிலே விளங்கும்  
 அருக்க மருக்கனென லாம்”

- தேரன் வெண்கு

gad;fs; : இது ஒரு கற்ப மருந்து.வளி நோய்களுக்கு நன் மருந்து ஆகும்.

## Constituents

Aerial parts contain flavonol glycosides colotropiside.

Root bark contains  $\beta$  – amyryn, 2 isomeric crystalline alcohols, giganteol and iso- giganteol.

Stem bark contains resinols  $\alpha$  and  $\beta$  calotropols, fatty acids.

Latex contains  $\alpha$  – amyryn.

The ash of calotropin gigantea is rich in potash (20.8%).

## uses

Root, bark, flower, leaf, latex are used in convulsions, disease of Vatham and Kapham, Leprosy, swelling in joints, worm infestation, skin disease, dyspnoea.

Indian Materia Medica,  
Dr.Nadkarani.

## fLf;fha;

jhtutpay; ngaH : Terminalia chebula. Retz  
gad;gLk; cWg;G : fha;  
Rit : JtHg;G> rpwpJ ,dpg;G> Gspg;G>  
fhHg;G> ifg;G  
gphpT - ,dpg;G  
nra;if - grpj;jPj;J}z;b> kykpsf;fp

## nghJf;Fzk;:

jhil fOj;jf;fp jhY Fwpaptplg;  
gPil rpypgjKw; NgjpKlk; - Milnal;lhj;  
J}ykpb Gz;thj Nrhzpfb khiyapuz;  
lhykpb Nghk;thpf;fh ahy;  
(mfj;jpaH Fzthflk;)

## gad;fs;:

GONeha;fs;> Fl;lK;> fhkhiy> epwk;khWgLjy;> NkfNuhfk;> Gz;> fpue;jp> gTj;jpuk;> kz;ilg;Gw;W> kz;ilf;fpue;jp> tha;g;Gz; Kjypa Neha;fs; jPUk;.

**Constituents:**

Tanins, anthraquinones, chebulinic acid, chebulagic acid, chebulic acid, enagic acid and gallic acid.

**Uses:**

It is used externally as a local application to chronic ulcers and wounds.

Indian Materia Medica,  
Dr.Nadkarani.

<b>fhl;Lr;rPufk;</b>		
jhtutpay; ngaH	:	Vernonia anthelmintica.willd.
gad;gLk; cWg;G	-	tpij
Rit	-	ifg;G
gphpT	-	fhHg;G
தன்மை	-	வெப்பம்

nra;if: grpj;jPj;J}z;b> cukhf;fp> rpWePHg;ng&f;fp> Kiw ntg;gfw;wp> clw;Nww;wp.

**nghJf;Fzk;:**

iffWg;G khWq; fbaNk fk;NghFk;  
nka;FspUk; gpj;jk; tpisANkh – nta;afhpf  
Nfhl;Lg; gizKiyaha; Fd;kth je;njhiyAq;  
fhl;Lew; rPufj;jf; fhz;.

- Fzghlk; %ypif tFg;G

**gad;fs;:**

cs;sq;iff; fUk;Gs;sp jPUk;> ntz;Fl;lK;> nrhwp rpuq;F jPUk;.

**Constituents:**

Seed contains resins, an alkaloid known as vernonine.

**Uses:**

Seeds are used in leprosy, skin diseases like psoriasis.

Indian Materia Medica, Dr.Nadkarani.

**fUQ;rPufk;**

jhtutpay; ngaH	-	Nigella sativa
gad;gLk; cWg;G	-	tpij
Rit	-	ifg;G
jd;ik	-	ntg;gk;



Njhlk;M kk;Nghf;FQ; Rf;F

(mfj;jpaH Fzthflk;)

**gad;fs;:**

nrhpahik, fPo;tha; Neha;, ,Uky;> laRuk; Nghk;

**Constituents:**

The dried ginger rhizomes contain the anti-ulcer compounds,  $\beta$ -sesquiphellandrene, -  $\beta$  - bisabolene, arcur cumene and shagol.

**Uses:**

Ginger is used to restore blood circulation and colour. It has anti – inflammatory, immunomodulatory and anti – atherosclerotic actions. The rhizome is used to heal wound. It produces anti – ulcer effect.

Indian Materia Medica,

Dr.Nadkarani.

**Vyk;**

jhtutpay; ngaH - Eletaria cardamomum

gad;gLk; cWg;G - tpj

Rit . fhHg;G

jd;ik - ntg;gk;

gphpT - fhHg;G

nra;if - ntg;gKz;lhf;fp> mfl;Ltha;tfw;wp>

grpj;jPj;J}z;b

**ngHJf;Fzk;**

njhZ;il tha;fTs; jhYF jq;fspy;

Njhd;Wk; Nehajp rhuk;gd; Nkfj;jhy;

cz;il Nghy;vOq; fl;b fphpr;ruk;

coiy the;jp rpye;jp tp\Q;Ruk;

gz;il ntf;if tpjhNeha; fhrKk;

ghOQ; Nrhkg; gpzptpe;J el;IKk;

mz;il aPistd; gpj;jk; ,itf;nfy;yhk;

My khq;fko; Vy kUe;jNj

(NjiuaH Fzthflk;)

**gad;fs;:**

gd;Nkfj;jhy; vOk; fl;b> rpye;jp eQ;R ,tw;iwg; Nghf;Fk; moiY Mw;Wk;

**Constituents:**

Cineol, Terpineal, Terpinene, Limonene, Sabinene.

**Uses:**

Diuretics, Carminative, Anti-inflammatory.

Indian Materia Medica,

Dr.Nadkarani.

**mKf;fuh**

jhtutpay; ngaH	-	Withania somnifera
gad;gLk; cWg;G	-	வேர்.
Rit	-	ifg;G
jd;ik	-	ntg;gk;
gphpT	-	fhHg;G

nra;if:

clw;Njw;wp, tPf;fKUf;fp, rpWePu;ngUf;fp, cwf;fKz;lhf;fp.

**Constituents:**

Anaferin is a ketone, Pyrazole, Withanine and Somniferine are alkaloids which are present in this plant.

**Uses:**

Root is used as application in obstinate ulcers and rheumatic swellings. Leaves are used as an anthelmintic and as an application to carbuncles.

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**nghJf;Fzk;:**

“nfhQ;re; JtHg;ghq; nfhba fgk; R+iyahp  
kpQ;R fug;ghd; ghz;L ntg;gjg;G – tpQ;rp  
KRTW NjhIKk;Ngh Kkfk; mdYz;lhk;  
mRtfe;jpf;nfd; wwp”

- mfj;jpaH Fzthfk;

**gad;fs;:**

fak;,:tspf;\$l;lq;fs; fug;ghd; Ruk; tPf;fk; ,itfisg; Nghf;Fk;. இது ஒரு கற்ப மருந்து.

**gRnea;****nghJFzk;**

jhfKo iyRI;fk; the;jp gpj;jk; thAgpu



Nkfk; tapw;nwupT tpf;fyoy; - khfhrq;

Fd;kk; tul;rp Flw;Gul;l y];jp RI;fQ;

nrhd;%yk; Nghf;Fepiwj; Jg;G.

- Fzghlk; jhJ rPt tFg;G

**gad;fs;**

jhf;,, coiyg;gpzp, mjpRI;fNuhfk;, the;jp, gpj;jhjp;fk;, thjtp\k; tpuzg;gpuNkfk;,  
tapw;nwupT, tul;rp, %yk; Mfpatw;iw ePf;Fk;.

**Mkzf;nfz;nza;:**

jhtutpay; ngaH : Ricinus communis. Linn

gad;gLk; cWg;G : tpij, vz;nza;

Rit : ifg;G

jd;ik : ntg;gk;

gphpT : fhHg;G

nra;if : thjklf;fp

**ngHJf;Fzk;:**

Mkzf;F nea;ahy; eyKz;lhk; ahtUf;Fk;

G+kzf;F NkdpGupFoNy - tha;kzf;ff;

nfhs;spy; tapW tpLq; NfhuKs;s thAtWk;

cs;spy; tU Fd;kk;Ngh NkhJ.

- mfj;jpaH Fzthflk;

**gad;fs;:**

,jd; tp;ijia Xl;il ePf;fp> miuj;J fl;bfsdp; kPJ itj;Jf; fl;btu> fl;bfs; vspjpy; gUj;J  
cilAk;.

Mkzf;F vz;nza;ia Kiyf;fhk;Gg; Gz;> Kiyf;fhk;G ntbG;G ,itfSf;F rPiyapy;  
eidj;Jg; Nghl;Ltug; Nghk;.

clk;gpy; Nky; Njhy; cuha;e;J FUjpf; Fok;gf; fz;lhy;> Mkzf;F vz;nza;iaj; jlt  
vhpr;ry; ePq;Fk;.

**Constituents:**

Ricinine, tonalbumin, Ricin, Ricinoleic acid, Stearic acid, and small quantity of Palmitine.

**Uses:**

It is used to treat Peritonitis, Piles, Scorpion-sting.

**Ntg;ngz;nza;:**

jhtutpay; ngaH : Azadirachta indica.  
gad;gLk; cWg;G : tpjj, vz;nza;  
Rit : ifg;G  
jd;ik : ntg;gk;  
gphpT : fhHg;G  
nra;if : GOf;nfh;yp> mOfyfw;wp> ntg;gKz;lhf;fp

**nghJf;Fzk;:**

“Ntk;gpd; tpjj;F kplrd;dp ghjKj;  
Njk;gptpOe; NjhLnkdj; NjH”  
- mfj;jpaH Fzthflk;

**gad;fs;:**

,jd; gUg;ig miuj;Jg; GOg;gl;l Gz;fSf;Fg; G+r Gz;zpd;W GOf;fs; ntspg;gLk;.  
Gz; MWk;.  
Ntk;gpd; nea;iag; G+r> ngUk; tsp Neha;fs;> foiyfs;> fug;ghd;> rpuq;F ,itfs;  
Nghk;.

**Constituents:**

Nimbin , Nimbinin, Nimbodin, Sulphur.

**Uses:**

It is used Externally for the skin infections like Eczema, Ringworm & Scabies.

-Indian Materia Medica, Dr.Nadkarani

**Njq;fha; vz;nza;:**

jhtutpay; ngaH : Cocus nucifera  
gad;gLk; cWg;G : Njq;fha; , vz;nza;  
Rit : ,dpg;G  
jd;ik : jl;gk;  
gphpT : ,dpg;G

**ngHJf;Fzk;:**

Njq;fhap nza;ajdhw;wPahy; tUGz;Nghk;  
ghq;fhff; \$e;jw; glHe;NjW – ePq;fhj  
gy;ybapd; NdhAk; glHjh kiu rpuq;Fk;  
my;ywg; Nghnkd;wwp.;

- Fzghlk; %ypif tFg;G

**gad;fs;**

Njq;fha; nea;ahy;> jPg;gl;l Gz;Zk;> gy;Neha;> glHjhkiu> rpuq;F Mfpaitfs;  
Nghk;.

**Constituents:**

Caprylic acid, Lauricacid, Myristic acid , Palmitic acid , Stearic acid.

**Uses:**

A tarry oil is prepared from the shell of the nut which is used only externally in the treatment of ring worm. Oil is used for boils.

-Indian Materia Medica,

Dr.Nadkarani

**∫ø!Äñ!½ö**

þó!¿ö ±ûÇçÄçÖóÐ ±ñ,ôÄÎ,çÈÐ.

**±û**

$\frac{3}{4}$ ¡ÄÄçÄø |ÄÄ÷ : Sesamum indicum Linn.

gad;gLk; cWg;G : tpj, vz;nza;

Í·Ä : þÉçôÒ

$\frac{3}{4}$ ý·Á : |ÄôÀõ

ÀçÄç× : þÉçôÒ

nra;if : - ûÇÆÄ¡üÈç, - ÄÄ¡;ì,ç,ÄÄ,¡Äç, ÄÈð°çÄ,üÈç.

**!Ä;Ð!½ö:**

"Òð¾ç¿ÄÉì ÌÇç÷f°ç âÄçôÒ |ÄöôÒÇ,ï

°ðÐÄí,ó¾ç ÉçÄçÇ·Á - |Äð¾×ñ¼¡í

,ñ§½ö !°Äç§e;ö, Ä¡ÄÄÆø,¡°§¿;ö

Òñ§½ö §Ä¡|Äñ!½Ä;ü §Ä;üÜ"

- Fzghlk; %ypif tFg;G

**gag;f;:**

Gj;jpf;Fj; njspT, clyf;F Fspu;r;rp, cly; G+upg;G, cly; td;ik cz;lhf;f;. fz;Neha;,  
fhJNeha;,, jiy nfhjpg;G, nrhup rpuq;F, Gz; ePq;Fk;.

**Constituents:**

Sesamin, Sesamolin, Phytosterol, Vitamin E, Carbohydrates  
18%, Mucilage 4%, woody fibre 4% , Fixed Oil 50 – 60%

Indian Materia Medica, Dr.Nadkarani.

**kQ;rs;**

jhtutpay; ngaH : Curcuma longa Linn  
gag;gLk; cWg;G : fpoq;F  
Rit : fhHg;G> ifg;G  
jd;ik : ntg;gk;  
gphpT : fhHg;G  
nra;if : kz%;l;b> mfl;Ltha;tfw;wp> ntg;gKz;lhf;fp>  
<uy;Njw;wp

**nghJf;Fzk;:**

kQ;rl;Fspjdf;F khwhj;JHf; fe;jnkhL  
tpQ;RKf rhl;baKk; tpl;lYf; - njhQ;rYWk;  
la nkhopA klHtpaHTq; fhzhJ  
ita kjdpy; tOj;J

**gag;f;:**

kQ;risg; nghbj;Jg; Gz;f; kPJ J}t> mitfs; MWk;.

**Constituents:**

Phellandrene, an alcohol called Turmerol and Caproic acid is  
present combined with Valeric acid.

**Uses:**

Juice of the fresh rhizome is applied to wound, bruises and  
leech-bites. It is used both internally and externally in skin diseases.

-Indian Materia Medica,  
Dr.Nadkarani

## BIO – CHEMICAL ANALYSIS OF VATHAKARAPPAN

### CHLOORANAM

**Preparation of the extract :** 100mgs of chooranam is weighed accurately & placed into a clean beaker and added a few drops of concentrated hydrochloric acid and evaporated it well. After evaporation cooled the content and added a few drops of conc. Nitric acid and evaporated it well. After cooling the content add 20ml of distilled water and dissolved it well. Then it is transferred to 100ml volumetric flask and made up to 100ml with distilled water. Mix well filter it . Then it is taken for analysis

### QUALITATIVE ANALYSIS

S.no	Experiment	Observation	Inference
1.	<b>Test for calcium</b> 2ml of the above prepared extract is taken in a clean test tube. To this add 2 ml of 4% ammonium oxalate solution is added to it.	A white precipitate is formed	Indicates the presence of calcium
2.	<b>Test for sulphate</b> 2ml of the extract is added to 5% barium chloride solution.	A white precipitate is formed	Indicates the presence of sulphate
3.	<b>Test for chloride</b> The extract is treated with silver nitrate solution.	A white precipitate is formed	Indicates the presence of chloride
4.	<b>Test for carbonate</b> The substance is treated with concentrated Hcl.	No brisk effervescence is formed	Absence of carbonate
5.	<b>Test for Starch</b>	No blue colour is formed	Absence of

	The extract is added with weak iodine solution		starch
6.	<b>Test for iron</b> <b>Ferric</b> The extract is treated with concentrated glacial acetic acid and potassium ferro cyanide.	No blue colour is formed	Absence of ferric iron
7.	<b>Test of iron</b> <b>Ferrous</b> The extract is treated with concentrated Nitric acid and ammonium thio cynate.	No Blood red colour is formed	Absence of ferrous iron
8.	<b>Test for phosphate</b> The extract is treated with ammonium molybdate and concentrated nitric acid.	No Yellow precipitate is formed	Absence of phosphate
9.	<b>Test for albumin</b> The extract is treated with Esbach's reagent.	No yellow precipitate is formed	Absence of albumin
10.	<b>Test for Tannic acid</b> The extract is treated with ferric chloride.	No blue black precipitate is formed	Absence of Tannic acid
11.	<b>Test for unsaturation</b> Potassium permanganate solution is added to the extract.	It gets decolourised	Indicates the presence of unsaturated compound
12.	<b>Test for the reducing sugar</b> 5ml of benedict's qualitative solution is taken in a test tube and allowed to boil for 2 mts and added 8-10 drops of the extract and again boil it for 2 mts.	No colour change occurs	Absence of reducing sugar
13.	<b>Test for amino acid</b> One or two drops of the extract is placed on a filter paper and dried it well. After	No violet colour is formed	Absence of amino acid

	drying, 1% Ninhydrin is sprayed over the same and dried it well.		
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**PHARMACOLOGICAL STUDIES**  
**ANTI - HISTAMINIC STUDY OF VATHA KARAPPAN**  
**CHLOORANAM**

**Aim**

To study the Anti-histaminic effect of Vatha Karappan Chooranam

**Preparation of the test drug**

1 gm of Vatha Karappan Chooranam was boiled with 20 ml of water for 15 minutes. 2ml of decoction was taken as the test drug.

**Procedure**

A guinea pig weighed about 350gms was starved for 48 hours. It was sacrificed by a blow on the head and external jugular vein was allowed to bleed. The abdomen was then cut and ileum was cut out and placed in a tray, which contained warm tyrode solution (37° C) and continuously aerated. The contents of the lumen of the ileum were washed and care was taken to avoid any damage to the gut muscle. An ileum segment having a length of about 3cm. was taken and tied in both ends with thread. The tissue was put in an organ bath and the effects of drug on histamine-induced contractions were recorded.

**Inference**

The drug Vatha Karappan Chooranam has significant anti histamine action.



## **ACUTE ANTI-INFLAMMATORY STUDY ON VATHA KARAPPAN CHOORANAM**

### **Aim**

To study the acute anti-inflammatory effect of Vatha Karappan Chooranam by Carrageenin induced hindpaw method in Albino rats.

### **Materials and Methods**

#### **Drug Preparation**

2 gms of Vatha Karappan Chooranam was suspended in 10ml of distilled water with gum acacia as suspending agent.

#### **Carrageenin induced Hind Paw Method**

Six healthy albino rats weighing 80-100 gm were selected. The volume of each hind paw was measured by using the mercury - plethysmograph.

After the measurement of hind paw of all the rats, they were divided into three groups each containing two rats.

First group was kept as control by giving distilled water 1ml/100 gm of body weight. The second group was given Ibuprofen 20mg/100gm body weight and kept as standard. Third group was given test drug Vatha Karappan Chooranam 100mg/100gm body weight.

The drugs were administered orally. One hour after the drug administration, 0.1ml 1%(w/v) of carrageenin suspension in water was injected in the plantar surface of Hind paw of all rats.

Three hour after carrageenin injection the hind paw volume was measured once again. From the differences in the initial and final hind paw volume, the degree of the inflammation was

calculated by taking the volume in the untreated control group as 100%.

The percentage of inflammation of the other group was calculated.

## Results

The details of the experimental results shown in the table.

### EFFECT OF VATHA KARAPPAN CHOORANAM

Group	Drugs	Dose/ 100gm of body weight	Initial Value	Final Value	Mean Difference	% Inflam- mation	% Inhibition
Control	Water	1ml	0.65	1.5	0.85	100.00	-
Standard	Ibuprofen	20mg/ 1ml	0.8	0.85	0.05	6.25	93.75
Test drug	Vatha Karappan	100mg/ 1ml	0.8	1.3	0.5	55.5	44.5

## Inference

The test drug Vatha Karappan Chooranam has moderate acute anti inflammatory effect when compared with the standard drug.

# **CHRONIC ANTI-INFLAMMATORY STUDY ON VATHA KARAPPAN CHOORANAM**

## **Aim**

To evaluate the chronic anti-inflammatory effect of Vatha Karappan Chooranam in rats by cotton pellets granuloma method.

## **Materials and method**

### **Drug preparation**

1 gm of Vatha Karappan Chooranam was suspended in 10ml of distilled water with gum acacia as suspending agent.

### **Cotton pellet Granuloma method**

#### **Procedure**

Six healthy albino rats weighing 80-100 gm were selected and divided into 3 groups each containing two rats.

In this procedure the drugs were given daily for 7 days. Before giving the drug, cotton pellets each weighing 10 mg were prepared and sterilized in an autoclave for about one hour under 15 Pounds atmospheric pressure.

On the day of experiment, each rat was anaesthetised with ether to implant 10mg of sterilized cotton pellet subcutaneously in the lower abdomen two on each side after making suitable incision and sutured carefully.

First group was kept as control group by giving distilled water of 1ml/100gm of body weight. To the second group, the standard drug Ibuprofen in a dose of 20mg 100gm of body weight was given.

The third group of animals was given tested drug Vatha Karappan Chooranam in a dose of 100 mg/100gm of body weight.

On the 8<sup>th</sup> day of the experiment, all the rats were sacrificed and cotton pellets found to be surrounded by granulation tissue were removed and dried in hot air oven at 55° C to 60° C.

## Results

The details of the experimental results are shown in the table.

### EFFECT OF VATHA KARAPPAN CHOORANAM

Group	Drugs	Dose/100gm of body weight	Pellet weight of the granuloma	% Inflam- mation	% Inhibition
Control	Water	1ml	250mg	100.00	-
Standard	Ibuprofen	20mg/1ml	56mg	22.4	77.6
Test drug	Vathakarappan Chooranam	100mg/1ml	155mg	58	42

## Inference

The test drug Vathakarappan chooranam has moderate chronic anti-inflammatory effect when compared with the standard drug.

# **ANALGESIC STUDY ON VATHA KARAPPAN CHLOORANAM**

## **Aim**

To study the analgesic effect of Vathakarappan Chooranam on albino rats by tail flick method.

## **Materials and Methods**

### **Preparation of the test drug**

1 gm of Vathakarappan Chooranam was suspended in 10ml of distilled water with gum acacia as suspending agent. This 1 ml contained 100 mg of the test drug.

### **Equipment**

Hot water bath.

### **Procedure**

Six male albino rats (weighing 80-100gms) were used in three groups. The animals were allowed to free access to food and water until they brought to the experiment. The animals, which showed the positive response to the stimulus within a given time, were selected for the study.

After the selection of animals, which were responding to stimulus within 2 seconds, they were divided into 3 groups, each group consisting of 2 rats.

The hot water was maintained at 55°C. The tip of the tail was immersed into the water bath and time was noted when rat flicked the tail.

First group was given the dose of 100mg/100gm body weight of the animal. Second group was administered with paracetamol at a dose of 20mg/100gm of body weight. Third group was given to the 1 ml of water and kept as control.

After the drug administration, the reaction time of each rat after half an hour, 1 hour and 1½ hour were noted in each group

(When a rat fails to flick the tail, it should not be continued beyond 8 seconds to avoid injury) and the average was calculated.

The results of control group, standard group and drug treated group were tabulated and compared.

### **EFFECT OF VATHA KARAPPAN CHOORANAM**

<b>Serial No</b>	<b>Group</b>	<b>Name of Drugs</b>	<b>Dose / 100 gram body weight</b>	<b>Initial Reading</b>	<b>After Drug Administration</b>		
					<b>½ hr Average</b>	<b>1 hr average</b>	<b>1 1/2 Average</b>
1.	Control	Water	1 ml	2.5	2.5	2.5	3.0
2.	Standard	Paracetamol	20mg / 1ml	2.5	4.0	5.0	6.5
3.	Test drug	Vathakarappan Chooranam	100 mg / 1 ml	2.5	2.5	3.5	3.5

### **Inference**

The test drug Vathakarappan Chooranam has mild analgesic action.

## FORM I- SELECTION PROFORMA

18. Non – Vegetarian ☐ ☐

### GENERAL EXAMINATION

19. Body Weight (kg)

20. Body Temperature (°F)    .

23. Blood Pressure (mmHg)    /

24. Pulse rate / min

25. Heart rate / min

26. Respiratory rate / min

	Yes (1)	No (2)
27. Pallor	<input type="checkbox"/>	<input type="checkbox"/>
28. Jaundice	<input type="checkbox"/>	<input type="checkbox"/>
29. Clubbing	<input type="checkbox"/>	<input type="checkbox"/>
30. Cyanosis	<input type="checkbox"/>	<input type="checkbox"/>
31. Pedal odema	<input type="checkbox"/>	<input type="checkbox"/>
32. Lymphadenopathy	<input type="checkbox"/>	<input type="checkbox"/>
33. Engorged veins	<input type="checkbox"/>	<input type="checkbox"/>

### CLINICAL EXAMINATION OF SKIN

34. Site Right (!) ☐ Left (2) ☐  
.....  
.....

35. Size (Length Cm)  
.....

36. Colour  
1.Normal ☐ 2.Reddish ☐ 3. Black ☐ 4. Greyish ☐



37. Shape

1. Irregular ☐ 2. Round ☐ 3. Dispersed ☐

38. Itching

1. No ☐ 2. Mild ☐ 3. Moderate ☐ 4. Severe ☐

39. Wheal

1. Present ☐ 2. Absent ☐

40. Eryhema

1. Present ☐ 2. Absent ☐

41. Crusting

1. Present ☐ 2. Absent ☐

42. Lichenification

1. Present ☐ 2. Absent ☐

43. Sensation

1. Normal ☐ 2. Hypersensitive ☐

44. Oozing - Blood (1) No ☐ (2) Mild ☐ (3) Moderate ☐ (4)

☐ s

Severe

45. Oozing - Water (1) No ☐ (2) Mild ☐ (3) Moderate ☐ (4)

☐

Severe

**YES (1)**

**NO(2)**

46. Ulceration

☐☐

47. Macule

☐☐

48. Papule

☐☐

49. Pustle

☐☐

50. Blister

☐☐

51. Vesicle

☐☐

52. Pigmentation

1. No ☐ 2. Hypo ☐ 3. Hyper ☐ 4. De- pigmentation ☐

## EXAMINATIONS OF VITAL ORGANS

	Normal (1)	Abnormal (2)
53. CVS _____	<input type="checkbox"/>	<input type="checkbox"/>
54. RS _____	<input type="checkbox"/>	<input type="checkbox"/>
55. Abdomen _____	<input type="checkbox"/>	<input type="checkbox"/>

## SIDDHA ASPECTS

### 56. NILAM

1. Kurinji ☐ 2. Mullai ☐ 3. Marutham ☐ 4. Neithal ☐ 5. Palai ☐

### 57. KALA IYALBU

1. Kaarkaalam ☐ 2. Koothirkallam ☐ 3. Munpanikaalam ☐  
4. Pinpanikaalam ☐ 5. Ilavenirkaalam ☐ 6. Muduvenirkaalam ☐

### 58. UDAL IYALBU

1. Vatham ☐ 2. Pitham ☐ 3. Kabam ☐ 4. Vatha Pitham ☐ 5. Vatha Kabam ☐  
6. Pitha Kabam ☐ 7. Pitha Vatham ☐ 8. Kaba Vatham ☐ 9. Kaba Pitham ☐

### 59. GUNA IYALBU

1. Sathuvam ☐ 2. Rasatham ☐ 3. Thamasam ☐

## IYMPORIGAL

	Normal (1)	Affected (2)
60. Mei	<input type="checkbox"/>	<input type="checkbox"/> .....
61. Vaai	<input type="checkbox"/>	<input type="checkbox"/> .....
62. Kan	<input type="checkbox"/>	<input type="checkbox"/> .....
63. Mookku	<input type="checkbox"/>	<input type="checkbox"/> .....
64. Sevi	<input type="checkbox"/>	<input type="checkbox"/> .....

## KANMENDHIRIUM / KANMAVIDAYAM

	Normal (1)	Affected (2)
65. Kai	<input type="checkbox"/>	<input type="checkbox"/> .....
66. Kaal	<input type="checkbox"/>	<input type="checkbox"/> .....
67. Vaai	<input type="checkbox"/>	<input type="checkbox"/> .....
68. Eruvaai	<input type="checkbox"/>	<input type="checkbox"/> .....
69. Karuvaai	<input type="checkbox"/>	<input type="checkbox"/> .....

## UYIR THATHUKKAL

### VATHAM

	Normal (1)	Affected (2)
70. Pranan	<input type="checkbox"/>	<input type="checkbox"/> .....
71. Abanan	<input type="checkbox"/>	<input type="checkbox"/> .....
72. Viyanan	<input type="checkbox"/>	<input type="checkbox"/> .....
73. Uthanan	<input type="checkbox"/>	<input type="checkbox"/> .....
74. Samanan	<input type="checkbox"/>	<input type="checkbox"/> .....
75. Nagan	<input type="checkbox"/>	<input type="checkbox"/> .....
76. Koorman	<input type="checkbox"/>	<input type="checkbox"/> .....
77. Kirukaran	<input type="checkbox"/>	<input type="checkbox"/> .....
78. Devathathan	<input type="checkbox"/>	<input type="checkbox"/> .....
79. Dhananjeayan	<input type="checkbox"/>	<input type="checkbox"/> .....

### PITTHAM

	Normal (1)	Affected (2)
80. Anar pittham	<input type="checkbox"/>	<input type="checkbox"/> .....
81. Ranjagam	<input type="checkbox"/>	<input type="checkbox"/> .....
82. Sathagam	<input type="checkbox"/>	<input type="checkbox"/> .....
83. Alosagam	<input type="checkbox"/>	<input type="checkbox"/> .....
84. Prasagam	<input type="checkbox"/>	<input type="checkbox"/> .....

### KABAM

	Normal (1)	Affected (2)
85. Avalambagam	<input type="checkbox"/>	<input type="checkbox"/> .....
86. Kilethagam	<input type="checkbox"/>	<input type="checkbox"/> .....
87. Pothagam	<input type="checkbox"/>	<input type="checkbox"/> .....
88. Tharpagam	<input type="checkbox"/>	<input type="checkbox"/> .....
89. Santhigam	<input type="checkbox"/>	<input type="checkbox"/> .....

## UDAL THATHUKKAL

	Normal (1)	Affected (2)
90. Saaram	<input type="checkbox"/>	<input type="checkbox"/> .....
91. Senneer	<input type="checkbox"/>	<input type="checkbox"/> .....
92. Oon	<input type="checkbox"/>	<input type="checkbox"/> .....
93. Kozhuppu	<input type="checkbox"/>	<input type="checkbox"/> .....
94. Enbu	<input type="checkbox"/>	<input type="checkbox"/> .....
95. Moolai	<input type="checkbox"/>	<input type="checkbox"/> .....
96. Sukkilam / Suronitham	<input type="checkbox"/>	<input type="checkbox"/> .....

**ENVAGAI THERVUGAL**

	Normal (1)	Affected (2)
97. Naa	<input type="checkbox"/>	<input type="checkbox"/> .....
98. Niram	<input type="checkbox"/>	<input type="checkbox"/> .....
99. Mozhi	<input type="checkbox"/>	<input type="checkbox"/> .....
100. Vizhi	<input type="checkbox"/>	<input type="checkbox"/> .....
101. Sparisam	<input type="checkbox"/>	<input type="checkbox"/> .....
102. <b>Naadi</b>	.....	

**MALAM**

	Normal (1)	Affected (2)
103. Niram	<input type="checkbox"/>	<input type="checkbox"/> .....
	<b>Yes (1)</b>	<b>No (2)</b>
104. Nurai	<input type="checkbox"/>	<input type="checkbox"/> .....
105. Kirumi	<input type="checkbox"/>	<input type="checkbox"/> .....
106. Kalappu	<input type="checkbox"/>	<input type="checkbox"/> .....
107. Erugal	<input type="checkbox"/>	<input type="checkbox"/> .....
108. Elagal	<input type="checkbox"/>	<input type="checkbox"/> .....

**MOOTHIRAM  
Neerkuri**

	Normal (1)	Affected (2)
109. Niram	<input type="checkbox"/>	<input type="checkbox"/> .....
110. Manam	<input type="checkbox"/>	<input type="checkbox"/> .....
111. Edai	<input type="checkbox"/>	<input type="checkbox"/> .....
112. Nurai	<input type="checkbox"/>	<input type="checkbox"/> .....
113. Enjal	<input type="checkbox"/>	<input type="checkbox"/> .....
114. <b>Neikuri</b>	1.Vatha Neer <input type="checkbox"/> 2.Pitha Neer <input type="checkbox"/> 3. Kaba Neer <input type="checkbox"/>	

.....

**LAB INVESTIGATIONS****BLOOD**

115. TC (Cells/Cumm)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>DC (%)</b>	116. N <input type="text"/>	<input type="text"/>	117. L <input type="text"/>	<input type="text"/>
	118. M <input type="text"/>	<input type="text"/>		
	119. E <input type="text"/>	<input type="text"/>	120. B <input type="text"/>	<input type="text"/>
ESR (mm) 121. ½ Hr	<input type="text"/>	<input type="text"/>	122. ESR (mm) 1 Hr	<input type="text"/>
123. Hb (g%)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Blood Sugar (mg%)**124. Fasting 125 . Post – prandial **URINE**126. Sugar Fasting 0. Nil ☐ 1. + ☐ 2.+ + ☐ 3. + + + ☐127. Sugar PP 0. Nil ☐ 1. + ☐ 2.+ + ☐ 3. + + + ☐

128 .Admitted to trial:

1.YES ☐2. NO ☐

129. If Yes, S.No

130. IP (1)

OP (2)

131. Date Of Purgation

132. Date of admission to the trial

**DRUGS ISSUED FOR O.P.PATIENTS**

133. No of Packs

134. Volume of Thylum

ml135. Date 137. Signature of Doctor: 136. Station

**A PILOT OPEN CLINICAL TRIAL OF VATHAKARAPPAN CHOORANAM  
AND AMANAKU ENNAI FOR VATHAKARAPPAN  
(ECZEMA)**

**FORM - II ASSESSMENT PROFORMA**

1. IP / OP No ..... 2. Bed no ..... 3. S.No .....

4. Name. ....

5. Date of admission 

--	--	--	--	--	--

6. Date of assessment 

--	--	--	--	--	--

7. Day of assessment 

--	--

**CLINICAL ASSESSMENT**

8. Site Right(1) Left(2)

-----

-----

9. Size (length cm) -----

10. Colour 1.Normal ☐ 2.Reddish ☐ 3. Black ☐

4. Silvery ☐

11. Itching 1.No ☐ 2.Mild ☐ 3.Moderate ☐ 4.Severe ☐

Present (!)

Absent (2)

12. Erythema ☐ ☐

13. Vesicle ☐ ☐

14. Pustule ☐ ☐

15. Crusting ☐ ☐

16. Lichenification ☐ ☐

17. Scaling ☐ ☐

18. Ulceration ☐ ☐

19. Oozing Blood (1) No ☐ (2) Mild ☐ (3) Moderate ☐ (4) Severe ☐

20. Oozing Water (1) No ☐ (2) Mild ☐ (3) Moderate ☐ (4) Severe ☐

21. Hyper Pigmentation (1). No ☐ (2). Mild ☐ (3). Moderate ☐

(4) Severe ☐

22. Naadi .....

23. Neerkuri .....

24. Neikuri .....

### LAB INVESTIGATIONS

#### BLOOD

25. TC (Cells/Cumm):

DC (%): 26.N- \_\_\_\_\_ 27. L - \_\_\_\_\_

28.M - \_\_\_\_\_ 29.E - \_\_\_\_\_

ESR (mm) 30. ½ Hr  31. 1 Hr

32. Hb (g%)

#### Blood Sugar (mg%)

33. Fasting  34. Post – prandial

#### URINE

35. Sugar Fasting 0. Nil ☐ 1. + ☐ 2.++ ☐ 3. +++ ☐

36. Sugar PP 0. Nil ☐ 1. + ☐ 2.++ ☐ 3. +++ ☐

37. **RESULT** Cured (1) ☐ Improved (2) ☐ No Change(3) ☐

Deteriorated (4) ☐

#### FOR O.P. PATIENTS

38. Drugs returned

1.. No. of Packs .....

2. Volume of thylum ..... ml

39. Drugs issued

1.. No. of Packs .....

2. Volume of thylum ..... ml

40. Date \_\_\_\_\_

42. Signature of Doctor: \_\_\_\_\_

41. Station \_\_\_\_\_

**A PILOT OPEN CLINICAL TRIAL OF VATHAKARAPPAN CHOORANAM  
AND AMANAKU ENNAI FOR VATHAKARAPPAN  
(ECZEMA)**

**CONSENT FORM**

**Certificate by Investigator**

I certify that I have disclosed all details about the study in the terms readily understood by the patient.

Date \_\_\_\_\_ Signature \_\_\_\_\_

\_\_\_\_\_

Name \_\_\_\_\_

**Consent by Patient**

I have been informed to my satisfaction, by the attending physician, the purpose of the clinical trial, and the nature of drug treatment and follow-up including the laboratory investigations to be performed to monitor and safeguard my body functions.

I am aware of my right to opt out of the trial at any time during the course of the trial without having to give the reasons for doing so.

I, exercising my free power of choice, hereby give my consent to be included as a subject in the pilot open clinical trial of *Vathakarappan Chooranam* and *Amanaku Ennai* for the management of *Vathakarappan*.

Date \_\_\_\_\_ Signature \_\_\_\_\_

Name \_\_\_\_\_

Date \_\_\_\_\_ Signature of Witness \_\_\_\_\_

Name \_\_\_\_\_

Relationship \_\_\_\_\_



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